

Transportation  
Library

# RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

FEB 1952

FEBRUARY 25, 1952

TRANSPORTATION  
LIBRARY

*Unlimited travel.. Self-centering..*



with the



## Single and Double Roller **SIDE BEARINGS**

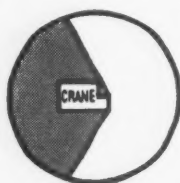
*Sturdy.. with Ample Capacity*

THE WINE RAILWAY APPLIANCE CO. • TOLEDO 9, OHIO

# BROWNHOIST - THE ONLY LOCOMOTIVE-CRANE CAB THAT PROVIDES A CLEAR VIEW IN EVERY DIRECTION



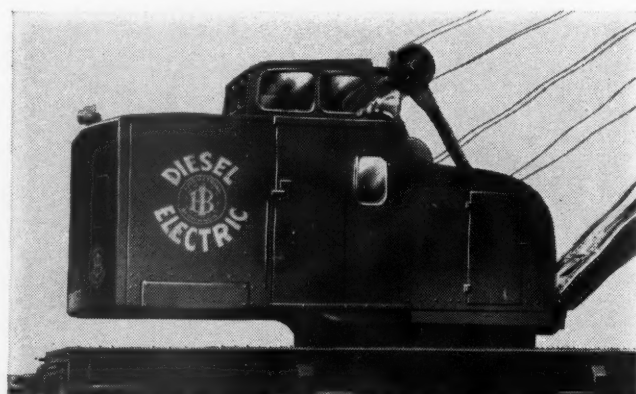
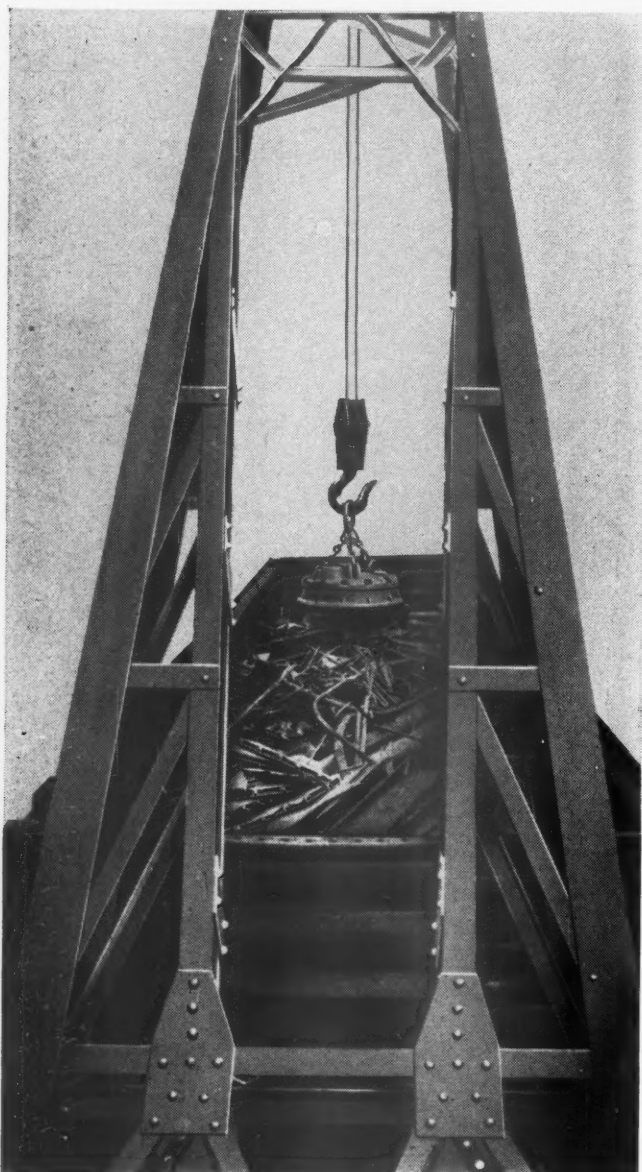
Approximate  
visibility from  
ordinary cab.



Approximate  
visibility with  
operator on side.



360 degree  
visibility from new  
Industrial Brownhoist  
Monitor-Type Cab.



**Mounted high** in the crane and surrounded by large windows, the operator in a Brownhoist patented Monitor-Type cab has full 360° visibility — forward, backward, and to both sides — providing safer operation, faster, more efficient loading and unloading. In addition the new Clear-Vision Boom is another Brownhoist feature that permits the operator an unobstructed view of his work. When unloading from high-walled railroad cars he can see right into the car.

**The Monitor-Type** cab is also designed for the safety and comfort of the operator. All controls are conveniently located and can be easily reached from a comfortable, well-raised seat. There's a soundproof partition between the operator and the machinery. There are doors on both sides of the cab and there's a 14" safety clearance between car body and rotating upperworks.

**Brownhoist Diesel** and Diesel Electric Locomotive-Cranes are available in capacities from 20 tons up for speeding materials handling with magnet, hook or bucket. Write today for complete information.

## BROWNHOIST BUILDS BETTER CRANES

**INDUSTRIAL BROWNHOIST CORPORATION, BAY CITY, MICHIGAN**  
DISTRICT OFFICES: New York, Philadelphia, Cleveland, San Francisco, Chicago, Canadian Brownhoist Ltd., Montreal, Quebec. AGENCIES: Detroit, Birmingham, Houston, Los Angeles.

# RAILWAY AGE

With which are incorporated the Railway Review, the Railroad Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office and Trade Mark Office in Canada.



**Simmons-Boardman Publishing Corporation:**  
James G. Lyne, President. Samuel O. Dunn, Chairman Emeritus. J. S. Crane, Vice-President and Secretary. C. Miles Burpee, Harry H. Melville, C. W. Merriken, John R. Thompson, William H. Schmidt, Jr., J. S. Vreeland, Fred W. Smith, Vice-Presidents. Robert G. Lewis, Assistant to President. Arthur J. McGinnis, Treasurer. Ralph E. Westerman, Assistant Treasurer.

**EDITOR** ..... James G. Lyne  
**EDITORIAL CONSULTANT** ..... Samuel O. Dunn  
**MANAGING EDITOR** ..... C. B. Tavenner  
**WESTERN EDITOR** ..... William H. Schmidt, Jr.  
**NEWS & FINANCIAL EDITOR** ..... Gardner C. Hudson  
**WASHINGTON OFFICE** ...  
Walter J. Taft ..... Joe W. Kizzia  
**TRAFFIC & TRANSPORTATION DEPARTMENT** ...  
Robert G. Lewis ..... John W. Milliken  
John S. Gallagher, Jr.  
**MECHANICAL DEPARTMENT** ...  
C. B. Peck ..... E. L. Woodward  
H. C. Wilcox ..... C. L. Combes ..... G. J. Weihofen  
**ELECTRICAL DEPARTMENT** ..... Alfred G. Oehler  
**ENGINEERING DEPARTMENT** ...  
M. H. Dick ..... Henry E. Michael  
Radford E. Dove ..... Ralph M. Schmidt  
**PURCHASES & EQUIPMENT** ..... Fred C. Miles  
**SIGNALING & COMMUNICATIONS DEPARTMENT** .. John H. Dunn  
**WESTERN NEWS DEPARTMENT** .. Arthur M. Cox, Jr.  
**ASSOCIATE EDITOR** ..... Charles Layng  
**LIBRARIAN** ..... Edith C. Stone  
**EDITORIAL ASSISTANT** ..... Elaine C. Farrar

Published weekly by the Simmons-Boardman Publishing Corporation at Orange, Conn., and entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price, \$3.00 a year to railroad employees only in U. S., U. S. possessions, Canada and Mexico, payable in advance and postage free. Subscription price to railroad employees elsewhere in the Western Hemisphere, \$10.00 a year; in other countries, \$15.00 a year. Two-year subscriptions double the one-year rate. Single copies 50¢, except special issues \$1. Address Robert G. Lewis, Assistant to President, 30 Church Street, New York 7.

Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 79 West Monroe Street, Chicago 3, Ill. Branch Offices: 1081 National Press Building, Washington 4, D. C.—Terminal Tower, Cleveland 13, Ohio.—Terminal Sales Building, Portland 5, Ore.—1127 Wilshire Boulevard, Los Angeles 17, Cal.—1204 Russ Building, San Francisco 4, Cal.—2909 Maple Avenue, Dallas 4, Tex.

## IN THIS ISSUE

### EDITORIAL COMMENT:

Not Enough Diesels .....	37
Not Enough Pottage for Such a Birthright .....	38

### FEATURE ARTICLES:

P.R.R.'s New Clearance Car .....	39
More Steam Locomotives Defective in 1951 .....	43
Barriers Between Departments Must Go to Obtain Maximum Paperwork Economies .....	46
Railroads in Korea—"Rail-Mindedness" Pays Off .....	50
Union-Shop Report Called "Intolerable, Impossible" .....	57

### NEWS FEATURES:

Last Year's Net Was 5.5 Per Cent Less Than 1941's, Despite 94.4 Per Cent Rise in Gross .....	15
Union Shop Agreements Facing Two Court Tests .....	16
Knudson Thinks I.C.C. Could Expedite Decisions on Rate-Increase Applications .....	17
Government Agencies Oppose Railroads On Ex Parte 175 Rate-Increase Proposal .....	18
Railroads Seek Only "Equality of Regulation, Taxation and Treatment," Metzman Tells Newsom .....	19
Baltimore & Ohio Marks 125th Anniversary .....	20

### DEPARTMENTS:

News of the Railroad World .....	15
Revenues and Expenses .....	27
Current Publications .....	77
New and Improved Products .....	78

Published by SIMMONS-BOARDMAN PUBLISHING CORPORATION, New York 7

Railway Age Railway Mechanical & Electrical Engineer Railway Engineering & Maintenance  
Railway Signaling & Communications Car Builders' Cyclopedias Locomotive Cyclopedias  
Railway Engineering & Maintenance Cyclopedias American Builder  
Marine Engineering & Shipping Review Marine Catalog & Buyers' Directory  
Books covering transportation and building

Railway Age is a member of Associated Business Publications (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service. Printed in U. S. A.



**INSTANT COMMUNICATION**  
**UNAFFECTED BY POOR VISIBILITY**

*is assured with*  
**"UNION" I.T.C.**



Curves, hills, fog, snow . . . conditions that interfere with hand signals . . . do not affect the efficiency of "Union" Inductive Train Communication.

"UNION" I.T.C. is ready at *all times* to provide instant voice communication between crews on the head and rear end of the same train—between crews on passing trains—between train

crews and wayside station personnel. There is no longer any need to relay hand or lamp signals around curves—or through darkness and bad weather.

Instant voice communication saves time and eliminates many costly delays. It can pay you to telephone or write your nearest "Union" District Office for complete information.

## **UNION SWITCH & SIGNAL**

**DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY**

**SWISSVALE**

**NEW YORK**

**CHICAGO**



**PENNSYLVANIA**

**ST. LOUIS**

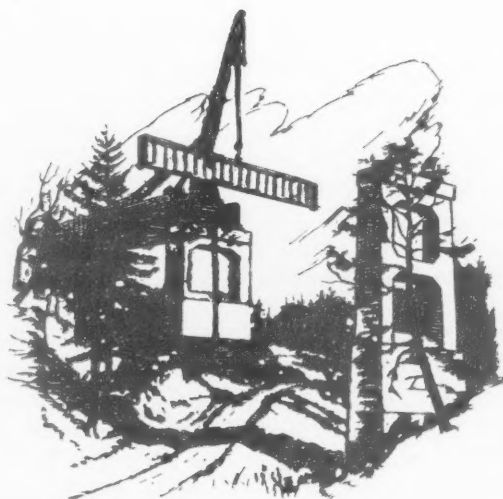
**SAN FRANCISCO**



# WEEK AT A GLANCE

## CURRENT RAILWAY STATISTICS

<b>Operating revenues, twelve months</b>	
1951 .....	\$10,390,672,580
1950 .....	9,473,093,128
<b>Operating expenses, twelve months</b>	
1951 .....	\$8,041,223,177
1950 .....	7,059,242,353
<b>Taxes, twelve months</b>	
1951 .....	\$1,203,238,466
1950 .....	1,194,615,254
<b>Net railway operating income, twelve months</b>	
1951 .....	\$942,696,259
1950 .....	1,039,621,540
<b>Net income, estimated, twelve months</b>	
1951 .....	\$693,000,000
1950 .....	783,000,000
<b>Average price railroad stocks</b>	
February 19, 1952 .....	55.22
February 19, 1951 .....	58.41
<b>Car loadings, revenue freight</b>	
Six weeks, 1952 .....	4,293,049
Six weeks, 1951 .....	4,233,732
<b>Average daily freight car surplus</b>	
February 16, 1952 .....	8,629
February 17, 1951 .....	2,021
<b>Average daily freight car shortage</b>	
February 16, 1952 .....	4,023
February 17, 1951 .....	34,789
<b>Freight cars delivered</b>	
January 1952 .....	8,642
January 1951 .....	5,949
<b>Freight cars on order</b>	
February 1, 1952 .....	120,251
February 1, 1951 .....	144,758
<b>Freight cars held for repairs</b>	
January 1, 1952 .....	95,425
January 1, 1951 .....	93,840
<b>Net ton-miles per serviceable car per day</b>	
November 1951 (preliminary) ....	1,035
November 1950 .....	1,017
<b>Average number railroad employees</b>	
Mid-January 1952 .....	1,221,846
Mid-January 1951 .....	1,254,110



## In This Issue . . .

**"AFTER TEN MONTHS OF FIGHTING AND BOMBING** . . . rails remain the backbone of enemy transportation." . . . In countries like Korea, "the main overland transportation burden remains with the railroads." . . . "Aerial bombardments apparently had not been sufficient . . . to disrupt the enemy's railroads." These conclusions as to the effect of war on railroads—and of railroads on war—are drawn from a letter, which begins on page 50, written by a furloughed Santa Fe employee, now with a railway battalion in Korea. It points up, once more, what railroad men already know (and steel allocators apparently don't)—the irreplaceable importance of rail transport in any program of military preparedness and security.

**IT'S CHEAPER**—obviously—for truck operators to use public streets for loading and unloading than to pay even modest rentals for platform space. And so, the big union truck terminal opened just a few years ago by the Port of New York Authority, with fanfare and ballyhoo, has been a complete "bust," so far as its original purpose—to get trucks off city streets—is concerned. It's used, by truckers, at less than one-fifth its estimated capacity. To save something from the fiasco, the authority hopes, as our news pages report, to lease the building to the Post Office Department. Incidentally, the terminal's failure can't be blamed on high city taxes—they are about one-twentieth of what the railroads would pay on a comparable building.

**NOT ENOUGH DIESELS**, now or in the immediate future, will be the inevitable result of the present indicated policy of cutting locomotive material allocations by as much as 41 per cent, according to the editorial comment on pages 37 and 38. The discussion is, in effect, a companion piece to the editorial on the freight-car material situation in last week's issue.

## In Washington . . .

**"INTOLERABLE AND IMPOSSIBLE"** were only two of the uncomplimentary adjectives applied by Donald R. Richberg to the "union shop" report of a Presidential emergency board, which turned down virtually every contention of management and upheld just about every pro-union-shop argument advanced by the brothers. The report itself, briefly noted in last week's issue, is the subject of a more detailed account on page 57 of this issue. Meantime, as reported in the news pages, the amendment to the Railway Labor Act which brought the union shop issue to the fore, is being challenged on constitutional

## WEEK AT A GLANCE

grounds in suits filed in Kentucky and in Washington state. The board's report is the subject of brief editorial comment on page 38.

**FASTER I.C.C. ACTION** on railroad rate increases is quite possible, merely by amendment of the commission's rules applicable to such proceedings, Defense Transport Administrator Knudson—who is also an I.C.C. member—told the New England Traffic Club on February 19. In the same address, which is summarized in the news columns, Mr. Knudson described larger steel allocations for freight-car construction as "a transportation necessity and a defense necessity"; and warned railroad labor that it "could well pay attention to what is happening" to railroad l.c.l. traffic and "cooperate in holding it."

**HOW RISING COSTS** have hurt the railroads has seldom been more strikingly illustrated than in the latest "Monthly Comment" of the I.C.C.'s Bureau of Transport Economics and Statistics, which is reviewed on page 15. Between 1941 and 1951, the "Comment" points out, while gross revenues were increasing by nearly 100 per cent, expenses were increasing so much faster that net railway operating income was actually down by 5.5 per cent, 1951 against 1941.

## ... And Elsewhere

**THE FIRST TRAIN TO REACH CHICAGO** from the East arrived just 100 years ago last week—on February 20, 1852, to be exact. It belonged to the Michigan Southern & Northern Indiana and actually halted at 22nd street, then the city's southernmost limit. Runner-up in the race was the Michigan Central. It "arrived" three months later at a temporary station some 10 blocks closer to the heart of the city. But the real winner was the city itself. The unprecedented growth which it was to experience was touched off by the establishment of these rail services to the East. Today both roads are part of the New York Central System.



AN ACCOUNTANT, not a bookkeeper, is the word to describe E. H. Bunnell, vice-president of the A.A.R.'s Finance, Accounting, Taxation and Valuation Department. Long an advocate of improved methods of doing paperwork, Mr. Bunnell, who retires this week, indicates, on pages 46-49, some of the fields in which he believes there is still plenty of room for the railroads to improve their paperwork procedures.

**THE OPINION THAT RAILROAD FREIGHT RATE INCREASES** are used as an excuse to raise ultimate consumer prices by more than the amount of the rate increase, was officially expressed during hearings by the Canadian Board of Transport Commissioners on the recently decided application of Canadian railways for a rate increase. "We have more than a suspicion," Chief Commissioner J. D. Kearney said, "that when freight rates have gone up, shippers have not only passed on the increase [to the buyer] but really used it as an excuse to raise prices."

**STEEL USERS MAY TAKE HEART** from an American Iron & Steel Institute report that manufacturers of that vital commodity plan to spend about \$1.3 billion this year for new equipment and construction. In 1953, the institute adds, another large cash outlay will be required to bring annual steel capacity up to the expected record high level of more than 120,000,000 tons. Last year's expansion program cost the steel industry \$1,041,000,000, a record high outlay that was 103 per cent above the \$513,000,000 spent during 1950. Steelmaking capacity itself was increased in 1951 more than 4,300,000 tons to a new high approaching 108,600,000 tons. In 1946, just after the end of World War II, this country's annual steelmaking capacity was 91,900,000 tons.



## Last Year's Net Was 5.5 Per Cent Less Than 1941's, Despite 94.4 Per Cent Rise in Gross

**I.C.C. Bureau's "Monthly Comment" analyzes 1951 financial results; also has articles on growth of trucking, employee accident records, territorial rate levels, distribution of carload freight by type of car, and holdings of railroad debt by life insurance companies**

Last year's operating revenues of \$10,391 million, which were reported by Class I railroads, reflected an increase of 94.4 per cent above the 1941 gross, but last year's net railway operating income, \$943 million, reflected a decrease of 5.5 per cent. This was pointed up in an analysis of 1951 financial results which was included by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission in the latest issue of its "Monthly Comment."

The "Comment" also included other articles on the growth of trucking on main rural roads, employee-accident records of the railroads as compared with other industries, comparative territorial railroad rate levels, distribution of carload freight traffic by type of car, and holdings of railroad funded debt by life insurance companies.

The 1951 gross of \$10,391 million supplanted \$9,672 million as the all-time high. It was 9.7 per cent above the 1950 gross of \$9,473 million, but operating expenses were up 13.9 per cent, reaching \$8,041 million, also an all-time high. Thus the drop of 9.3 per cent in 1951 net railway operating income, as compared with the previous year. The 1951 net income, \$693 million, was down 11.6 per cent as com-

pared with 1950, but it was 38.6 per cent above the comparable 1941 figure of \$500 million.

### Net-Gross Ratios

The bureau's further analysis of last year's results included presentations and discussions of data showing percentages of gross converted into net railway operating income and net income in the years since 1940. As to net railway operating income, the range was from 19.9 per cent in 1942 to 8 per cent in 1949, and the 1951 figure was 9.1 per cent. As to net income the range was from 12.1 per cent in 1942 to 3.8 per cent in 1946, and the 1951 figure was 6.7 per cent.

Data used in the analysis also included that in the accompanying table, which is reproduced from the "Comment." For 40 large railroads (those with 1951 gross above \$50 million), the table shows percentages of 1951 revenues converted into net railway operating income, together with each road's percentage contribution to the revenues and net railway operating income of its territory.

The article on the growth of trucking on main rural roads was based on figures published by the Bureau of Public Roads. The I.C.C. bureau's an-

alysis of the data pointed out how they showed "a continuation in 1950 of the increase in both for-hire and private trucking ton-miles on main rural roads. Also continued were the trends to a greater proportion of for-hire ton-miles and to greater use of vehicle combinations."

During the 14-year period from 1936 to 1950, the ton-miles of for-hire trucks and combinations increased 475.8 per cent (from 11.9 billion to 68.6 billion), while the increase in ton-miles of private trucks and combinations was 226.3 per cent (from 16.1 billion to 52.5 billion).

As for the trend toward greater use of heavier units and vehicle combinations, the figures showed that 58 out of every 1,000 empty and loaded trucks and truck-trailer combinations in 1950 weighed over 50,000 lb. The comparable 1949 figure was 36, while that for the 1936-37 period was 3.

As for combinations involved in the 1950 count, 165 out of 1,000 weighed over 50,000 lb., an increase of 29.9 per cent above the 1949 figure of 127. Meanwhile, the number that weighed less than 30,000 lb. dropped 10 per cent—from 480 per 1,000 in 1949 to 432 in 1950.

### Railroads Safest

The review of employee accident records was based on I.C.C. figures for railroads and data for other industries as published by the Bureau of Labor Statistics. The comparison showed a 1950 frequency rate of 14.16 (injuries per million man-hours) for the railroads, and a rate of 14.7 for manufacturing industries as a whole. Rates



ROAD	Per cent net railway operating income of revenues		Per cent revenues of total revenues in territory		Per cent of total net railway operating income in territory	
	1951	1950	1951	1950	1951	1950
<b>EASTERN DISTRICT AND POCAHONTAS REGION</b>						
Pennsylvania .....	5.70	6.22	22.56	22.23	15.57	14.82
New York Central .....	4.96	4.93	17.43	18.15	10.48	9.59
Baltimore & Ohio .....	8.16	8.48	9.75	9.62	9.63	8.74
Chesapeake & Ohio .....	13.43	14.40	7.95	7.62	12.93	11.74
Norfolk & Western .....	14.50	17.30	4.46	4.01	7.84	7.44
Erie .....	11.05	11.72	3.86	3.97	5.17	4.98
N. Y., C. & St. L. ....	13.93	17.14	3.47	3.51	5.86	6.45
N. Y., N. H. & H. ....	4.96	7.23	3.44	3.60	2.07	2.79
Reading .....	10.15	10.92	2.83	2.84	3.48	3.33
Wabash .....	9.06	10.92	2.40	2.49	2.63	2.92
Del., Lacka. & Western .....	9.47	10.99	1.94	1.97	2.22	2.32
Boston & Maine .....	5.55	8.03	1.91	2.07	1.28	1.78
Lehigh Valley .....	13.13	11.79	1.71	1.70	2.72	2.15
Delaware & Hudson .....	11.96	13.13	1.28	1.31	1.85	1.84
Grand Trunk Western .....	6.55	14.57	1.24	1.37	.98	2.14
Elgin, Joliet & Eastern .....	7.64	15.48	1.18	1.17	1.10	1.94
Total (16 roads) .....	8.11	9.05	87.41	87.63	85.81	84.97
<b>SOUTHERN REGION</b>						
Illinois Central .....	10.39	13.65	20.28	20.96	19.51	22.33
Southern .....	10.66	13.31	18.02	18.22	17.79	18.93
Louisville & Nashville .....	10.75	12.82	15.56	15.42	15.49	15.43
Atlantic Coast Line .....	6.30	7.34	10.94	10.15	6.39	5.82
Seaboard Air Line .....	12.85	12.81	10.26	10.29	12.21	10.29
Gulf, Mobile & Ohio .....	10.78	11.87	6.09	5.96	6.08	5.52
Total (6 roads) .....	10.31	12.39	81.15	81.00	77.47	78.32
<b>WESTERN DISTRICT</b>						
A. T. and S. F. and affiliated companies .....	12.55	15.54	13.25	13.16	17.76	16.91
Southern Pacific Co. ....	8.92	10.11	11.82	11.84	11.25	9.90
Union Pacific .....	7.06	9.48	11.73	11.71	8.84	9.19
Chic., B. & Q. ....	11.30	15.42	6.19	6.17	7.47	7.87
C., M., St. P. & P. ....	5.77	8.59	6.16	6.43	3.80	4.57
Great Northern .....	9.36	12.06	5.76	5.73	5.76	5.71
Missouri Pacific .....	10.01	14.37	5.56	5.55	5.94	6.59
Chicago & North Western .....	3.55	4.83	4.72	4.76	1.79	1.90
Chic. R. I. & Pacific .....	8.69	11.10	4.61	4.52	4.28	4.15
Northern Pacific .....	9.40	13.57	4.03	4.21	4.05	4.72
Texas & New Orleans .....	8.06	10.14	3.22	3.22	2.77	2.70
St. L.-S. F. ....	10.18	13.66	2.88	2.88	3.14	3.25
M-K-T Lines .....	9.10	11.73	1.83	1.95	1.78	1.89
Denver & R. G. W. ....	15.06	15.04	1.81	1.66	2.90	2.07
Texas & Pacific .....	12.78	13.64	1.80	1.78	2.46	2.01
St. L. S. W. Lines .....	12.42	17.83	1.62	1.57	2.15	2.32
Duluth, Missabe & I. R. ....	8.57	14.41	1.32	1.16	1.20	1.39
Western Pacific .....	13.86	19.02	1.29	1.24	1.92	1.95
Total (18 roads) .....	9.33	12.03	89.60	89.54	89.26	89.09

of transportation industries, other than railroads, included these: Trucking and hauling, 36.6; local transportation systems, 16.1; warehousing and storage, 32.5; stevedoring, 59.4.

Rates were also shown for these three non-manufacturing industries: Construction, 41; trade, 13.8; coal mines, 52.8.

The comparative figures on territorial rate levels showed that intra-territorial rates have increased since 1947 by percentages ranging from 18 in Southwestern territory to 29 in Official territory. The effect, the bureau calculated, has been to bring the intra-territorial levels closer together. The calculation employed index numbers based on traffic common to all territories and on the five-territory average for each year as 100.

The index numbers for 1947 and 1950, respectively, were as follows: Official, 97 and 103; Southern, 99 and 100; Western Trunk Line, 100 and 100; Southwestern, 98 and 95; Mountain Pacific, 106 and 102.

#### Car Utilization

The article on the distribution of carload traffic by type of car was based on data gathered in the bureau's waybill study. The figures indicated that about 82 per cent of the 1950 carloads

were handled in three types of cars—box, 37.35 per cent, gondola, 13.93 per cent, hopper, 30.69 per cent.

The figures also indicated that 84.6 per cent of the box-car traffic moved less than 1,000 mi., and 49.1 per cent moved less than 400 mi. In the case of refrigerator cars, 51.6 per cent moved from 1,000 to 3,000 mi. The bulk of the traffic handled in stock, gondola, hopper, flat, special and tank cars moved less than 1,000 mi.; the percentages of such movements to the total traffic handled in these cars ranged from 82.9 per cent for stock cars to 99.9 per cent for hopper cars. For all types of cars combined, 90 per cent of the traffic moved less than 1,000 mi. and 65 per cent moved less than 400 mi.

The article on investments of life insurance companies in railroad funded debt showed that the insurance-company holdings reached a peak of about \$3,000 million in 1951. The proportion of total railroad funded debt which was held by life insurance companies increased from 22.2 per cent in 1930 to 29.7 per cent in 1950. The actual holdings, however, increased only \$32 million (from \$2,862 million to \$2,894 million), the total debt having dropped meanwhile, from \$12,901 million to \$9,733 million.

## Union Shop Agreements Facing Two Court Tests

Two suits which will test the validity of the 1951 "union shop" amendment to the Railway Labor Act have been recently filed in federal district courts in the states of Kentucky and Washington.

One has been brought against the Brotherhood of Railway Clerks and against the Louisville & Nashville, by three employees of the road's accounting department. The other has been brought against the Northern Pacific by members of the United Railroad Operating Crafts. In this case the Brotherhood of Railroad Trainmen has petitioned to intervene, presumably to help the railroad under an indemnity clause within their union shop agreement.

In the L. & N. case, the plaintiffs state that the clerks' brotherhood has "made demand" upon the railroad for a union shop agreement which, if adopted, would deprive them, and all other non-union employees of the same department, of "an essential of life, liberty and property without due process of law." They are seeking a declaration of rights, inasmuch as membership in the brotherhood would become a condition of employment if a union shop agreement were concluded. They maintain that neither the union shop nor any form of "union security" is a "working condition" as contemplated by the Railway Labor Act, and that their right to work for a livelihood without being required to join and maintain membership in the union is "an inherent, fundamental and inalienable right inuring to them as citizens of the United States and the Commonwealth of Kentucky" to which they are entitled without "consent or interference of the railroad or the union." They state that, to the extent the amendment requires or permits the railroad and the union to adopt a union shop agreement, "it is unconstitutional and void as contravening the protection and guarantees secured . . . by the fifth, ninth and tenth amendments of the Constitution of the United States."

The plaintiffs also pointed out that because railroad auditing is different from that of most other businesses, it would be difficult, if not impossible, for them to find employment elsewhere, and therefore the union shop agreement would deprive them of their fundamental right to labor without unlawful interference. They added that, in seeking a union shop, the union "will sacrifice the fundamental rights of the minority members of the craft, not for the benefit of the majority, but for the sole benefit of the union."

#### Outcome Pending

At present this case is awaiting the convention of a three-judge court—a procedure necessary to hear all cases where the constitutionality of a federal law is under question. The plaintiffs

are seeking a permanent injunction against further bargaining and against adoption of any agreement in which membership in the union might become a condition of employment. They are also seeking to restrain the railroad from a "check off" of union dues.

The Northern Pacific case follows the same vein with respect to the possible unconstitutionality of the union shop amendment, but it differs in one basic respect: The plaintiffs are members of another union. The amendment contains a proviso exempting members of one recognized labor organization from having to become a member of another because of the adoption of a union shop agreement. (This provision was intended primarily for cases of

overlapping duties, such as conductors working as trainmen, locomotive engineers as firemen, etc.)

In its suit against the N.P., the United Railroad Operating Crafts maintains that it is a national railway labor organization falling under this exemption proviso. The Brotherhood of Railroad Trainmen already has a union shop agreement in effect with the N.P. As the B.R.T. denied that the U.R.O.C. came under the exemption proviso, the railroad dismissed several of its members, thereby precipitating the test case. The U.R.O.C. has obtained a temporary restraining order staying the dismissal notice and an injunction preventing dismissal pending trial of the complaint on its own merits.

has been "siphoned away . . . by the Post Office" within the past few years. "It would appear," he also said, "that the shipper and the public are going to have to decide whether they want express type matter to move by mail, in part at taxpayers' expense, or by the traditional means of railway express."

The address also included Mr. Knudson's prediction that the country will get "bigger and better highway systems," because "the sheer economic force of 52 million automobiles . . . will bring this about . . . not to mention the political and sociological factors involved." On the basis of that prediction, the D.T.A. administrator offered this advice: "It will be the better part of wise statesmanship and 'transportation' to recognize this patent fact and to try to correlate this impending development with what we already have in the form of rolling wheels of all kinds."

#### "Slow-Motion" Rate Cases

Mr. Knudson's comment on the slow-motion of rate cases got under way with his reference to fears of those who have professed to see "a threat to private ownership" in the handling of railroad revenue proceedings.

The D.T.A. administrator went on to note that truckers get quick action by merely filing tariffs carrying their rate proposals—just as the railroads did when they published truck-competitive rates on iron and steel articles. The only proceeding in connection with those tariffs was the oral argument heard by the commission on petitions for suspension, and it denied the petitions.

Meanwhile, however, Mr. Knudson recognized that to suggest the "mere filing of tariffs" by the railroads when

## Knudson Thinks I.C.C. Could Expedite Decisions on Rate-Increase Applications

**D.T.A. administrator also warns of need for more freight-car steel, and gives views on l.c.l. situation and plight of Express Agency**

Administrator James K. Knudson of the Defense Transport Administration, who is also a member of the Interstate Commerce Commission, thinks that decisions on railroad applications for general increases in freight rates could be expedited by the commission "within its present legislative charter simply by amending its general and special rules as they apply to such proceedings." Mr. Knudson expressed this opinion in a February 19 address before the Traffic Club of New England at Boston.

In the same address, the D.T.A. administrator warned that "the channeling of more steel into freight-car construction is both a transportation necessity and a defense necessity." He also discussed the l.c.l. situation and the plight of the Railway Express Agency, saying in the former connection that "railroad labor could well pay attention to what is happening to this kind of traffic on the rails and cooperate in holding it."

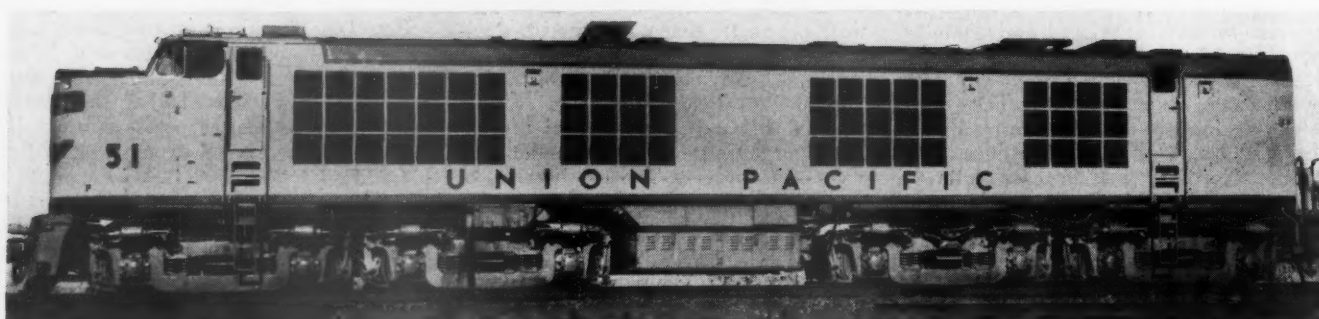
As to the express business, Mr. Knudson referred to the traffic that



**IT'S A YEAR OF ANNIVERSARIES for Pullman-Standard!**—In addition to celebrating the centennial of its Michigan City, Ind., plant (*Railway Age*, January 28, page 20), the Pullman-Standard Car Manufacturing Company is also mark-

ing the golden anniversary of its Butler, Pa., plant. Cars produced at Butler this year (such as this Chicago Great Western 50-ft. gondola) bear a special stencil, as shown in the photograph, proclaiming the event.





**LATEST GAS TURBINE LOCOMOTIVE**, the first of an order of 10 to be built for the Union Pacific by the General Electric Company, has been delivered. It differs from the earlier pilot model in that it is single-ended. It is 84 ft. long, weighs 278 tons, and has a tractive force of 105,000 lb. The illusion

of derailment in this picture stems from the fact that the picture was taken on General Electric's multiple-gaged test track at its Erie, Pa., works. Actually, the locomotive is resting on a pair of standard gage rails behind the rail seen under the equalizers.

they want general rate increases is to over-simplify a situation that is "complicated . . . by outstanding minimum rate orders and the fourth section." Thus, he did not undertake to make a "complete suggestion," but intended only to "indicate the problem and emphasize its gravity."

At the same time Mr. Knudson said that, "at an early opportunity," he hoped to discuss the matter "somewhat more in detail," and "put forth a suggestion as to appropriate means for expediting these proceedings." He then ended his present comment on the matter with the expression of his belief that modifications of the commission's rules of practice might help.

In his discussion of the l.c.l. situation, the D.T.A. administrator asserted that he saw "no justification" for continuing a service "without profit," just to "keep in the competitive 'swim.'" His suggestion that labor might well cooperate in an undertaking to hold the l.c.l. business on a profitable basis was followed by this further comment:

"Railroad management must realize that it is service that the shipper demands most in this field and gear up the speed at convenience of delivery

accordingly. Perhaps some joint operating plans with motor carriers and air lines (as they come more into the picture) could be perfected to the advantage of all concerned."

In leading up to his warning of the need for more freight-car steel, Mr. Knudson said that cars built out of third-quarter allotment would "barely offset probable retirements." Thus, he added, "the railroads will be left in a treadmill situation, unable to build up their capacity and prepare to carry the greater industrial output which defense production officials have forecast for 1952 and 1953, unless this situation changes."

The D.T.A. administrator's discussion of highway transport cited figures indicating trucks are "here to stay," so, he added, "we all had better adjust to that fact." It is Mr. Knudson's view that the "bigger and better highways" which he expects to be built will resolve issues raised by ton-mile tax laws; the lack of uniformity in truck size and weight regulations, "which serve as effective barriers to a free flow of interstate commerce"; and "the emotionalized thinking that condemns every highway vehicle but the pleasure car."

general counsel of the Baltimore & Ohio and chief counsel for the railroads, assured Division 2 that rail carriers are asking authority to increase rates and "it is their intention to publish all rates that may be allowed as a result of this proceeding."

The roads are asking about 7.2 per cent overall. Their original plea in Ex Parte 175 was for a 15 per cent increase, subject to some hold-downs. Last August they received increases of 9 per cent in the East and 6 per cent in the South and West. Subsequently, they petitioned the commission to reopen the proceeding and authorize the full increase originally requested.

Presentations in support of this further increase were made at January hearings (*Railway Age*, January 21, page 11, and January 28, page 16). Oral argument in the case is scheduled to begin February 25.

#### "Hold-Downs" Opposed

The American Waterways Operators in the hearings last week told Division 2 they had "no objection" to necessary freight rate increases. They did object, however, to any further maximum hold-downs, and suggested that railroads be required to "reexamine" their water competitive rates "with the objective of increasing them."

Louis H. Bean, assistant to the secretary, Department of Agriculture, offered a summary presentation for that department.

"I wish to state the position of the Department of Agriculture in opposition to any further increase in freight rates and charges, particularly on agricultural commodities, including fish and processed foods, and on farm supplies," Mr. Bean said.

Main reasons for the department's opposition, as outlined by Mr. Bean, were set out as follows: A rate increase would discourage agricultural production; and higher rates would be unsound "from the standpoint of the railroads' own long-time economic good."

Increased transportation costs would also go counter to the department's efforts to reduce distribution costs and narrow the price spread between producers and consumers, Mr. Bean said.

## Government Agencies Oppose Railroads On Ex Parte 175 Rate-Increase Proposal

Four government agencies last week joined other witnesses in opposing any new rate increase in Ex Parte No. 175. New hearings in the proceeding began February 18 before Division 2 of the Interstate Commerce Commission.

The Department of Agriculture, the General Services Administration, the Office of Price Stabilization and the Tennessee Valley Authority are among those generally opposing a further boost in freight rates.

The Department of Commerce is also participating in the case but has not as yet taken a position, other than that of "helping complete the record." Dr. Beatrice Aitchison, of the department's

Office of Transportation, submitted an exhibit indicating the department feels 1952 traffic volume may be higher than rail carriers expect.

Motor carriers and water carriers also made presentations at last week's hearings. They urged that railroads be required to place in effect all increases the I.C.C. may authorize.

The American Trucking Associations said the commission should issue a "compulsory" order. Edgar S. Idol, counsel for A.T.A., said motor carriers fear selective rail rate reductions, and railroads should be required to use any authorized increases "in their entirety."

E. H. Burgess, vice-president and



He also adopted the previously stated position of O.P.S., that higher freight rates would be "inflationary."

John C. McWilliams, G.S.A. witness, said the railroads since 1946 have tried to find a solution to their overall revenue needs through the medium of freight rate increases.

"To the best of my knowledge there has never been a demonstration by the railroads of the revenue needs of the freight service by itself," he said. He went on to raise questions "as to the propriety of requiring the freight rate payer to absorb the deficit from other traffic."

The exhibit submitted by Dr. Aitchison of the Department of Commerce contained figures showing the department estimates 1952 revenue ton-miles will be about 657 billion compared to

railroad estimates of approximately 640.6 billion (under current rates).

Present rates would yield net railway operating income estimated at \$971.7, according to Dr. Aitchison. The carrier estimate is \$926.3 million. Under the proposed higher rates, net railway operating income would approximate \$1,258,600,000, and the rate of return would be 5.16 per cent, Dr. Aitchison said. The roads have figured the higher rates would yield a rate of return of 4.95 per cent.

The rate-case hearings were continuing as this issue went to press. Shipper groups scheduled to be heard during the remainder of the week included the Southern Traffic League, the National Coal Association and other coal groups, the West Coast Lumbermen's Association, and iron and steel interests.

## Railroads Seek Only "Equality of Regulation, Taxation and Treatment," Metzman Tells Newsom

Thirty-seven Eastern railroads, on February 18, declared that it is their policy to seek equality of government regulation, taxation and treatment of all forms of transportation.

The policy was stated by Gustav Metzman, chairman of the Eastern Railroad Presidents Conference and president of the New York Central, in a letter to Herschel D. Newsom, master of the National Grange, which, last month, urged reexamination of the entire national transportation policy. (*Railway Age*, January 21, page 14.)

Public reaction to the Grange statement "has been immediate and heartening," Mr. Metzman said, adding that "from the territories served by the Eastern roads have come offers of support from many individuals and organizations. Because of your statement, the railroads are finding they have an abundance of friends." The rails, he added, "seek only the fair and equal treatment, the equality of regulation and competitive conditions that are promised in the National Transportation Act of 1940."

The complete text of Mr. Metzman's letter to Mr. Newsom follows:

"Almost a month has now elapsed since the National Grange suggested the need for a reexamination of our national transportation policy.

"Public reaction to this suggestion has been immediate and heartening.

"From all territories served by the Eastern roads have come offers of support from many individuals and organizations. Because of your statement the railroads are finding they have an abundance of friends.

"This public reaction to your suggestion is a great tribute to the respect your organization commands from the American public. It goes without saying that the National Grange could have earned this respect only through years of dedication to the common good.

"Your statement also must have been heartening to all those who truly believe

in our system of free enterprise and who—consistent with their convictions—have the courage to oppose government subsidies even when such subsidies might profit them.

"Apparently your statement succeeded in giving the American people a new understanding of the handicaps under which the railroads are forced to operate, and a new understanding too, of the benefits the entire economy can expect once the railroads are accorded fair and equal treatment.

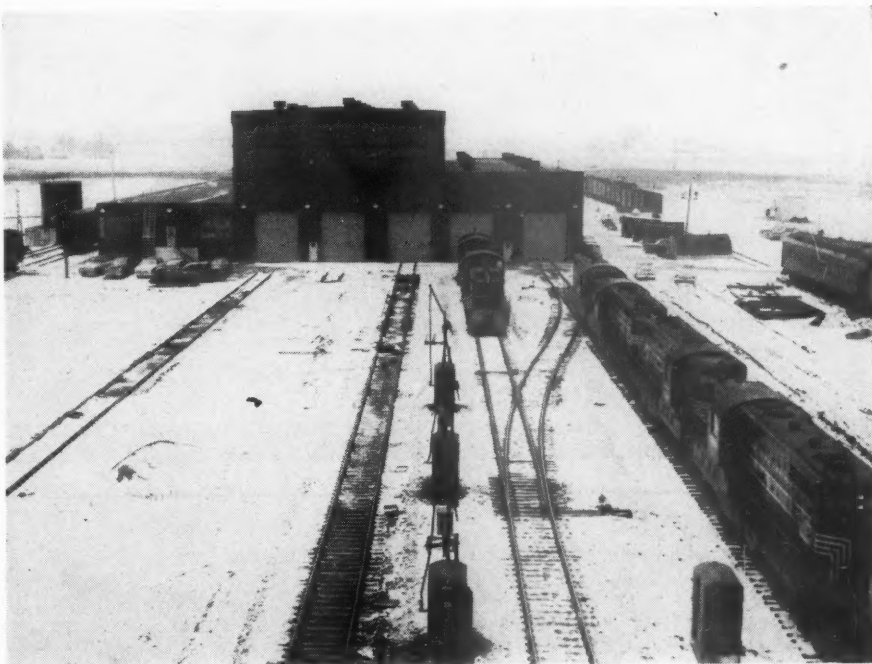
"For, as you know, our aims and aspirations are modest indeed. We seek only the fair and equal treatment, the equality of regulation and competitive conditions, that is clearly intended in the Transportation Act of 1940.

"Action of the National Grange in asking for a re-study of present transportation policies is speeding the day when the American people will enjoy the benefits of the most efficient national transportation system."

## Truck Caused Collision With 109 Train Casualties

A motor truck "occupying a rail-highway grade crossing immediately in front of an approaching train" caused the September 21, 1951, accident on the Chicago, Rock Island & Pacific near Elbing, Kan., where a passenger was killed and 97 passengers and 11 railroad employees were injured.

This was the finding of an Interstate Commerce Commission report by Commissioner Patterson. The report,



**THIS NEW \$2-MILLION DIESEL** maintenance shop, just opened by the New York Central at Stanley yard, Toledo, Ohio, is "another stride toward the post war goal of system-wide dieselization"—which the Central now hopes to achieve in approximately eight years. The shop, according to C. F. Wiegeler, general manager of N.Y.C. Lines West of Buffalo, will be servicing headquarters for about 110 freight and switching diesels operating in the Michigan Central, Ohio Central, and Big Four districts. The main building, 165

feet by 240 feet in size and three stories high, has three through tracks and two stub-end tracks. The complete plant also includes a new type of lubrication system which can service nine diesel units at the same time; a specially designed fire fighting system; offices; storerooms; wash racks; and fueling and sanding facilities. As part of the overall dieselization plan at Stanley yard, the railroad is building a \$300,000 dormitory-restaurant building for road crews, with 86 individual sleeping rooms.

## Baltimore & Ohio Marks 125th Anniversary

February 28, 1952, marks the 125th anniversary of the granting by the Maryland Legislature, in 1827, of the charter of the Baltimore & Ohio Railroad.

In recognition of the event, the United States Post Office Department has authorized an initial printing of 110,000,000 commemorative three-cent postage stamps, as illustrated herewith, which will go on sale at Baltimore on February 28. Issuance of the stamp and other ceremonies in connection with the 125th anniversary will be the occasion of a special luncheon to be held by the railroad at the Sheraton Belvedere Hotel in Baltimore on the same day.

Originally intended to connect the port of Baltimore with the Ohio river, the B. & O. now serves 13 states and the District of Columbia. By its own rails, or those of affiliated companies, it reaches such cities as New York, Philadelphia, Baltimore, Washington, Buffalo, Rochester, Pittsburgh, Cleveland, Toledo, Detroit, Chicago, St. Louis, Louisville and Cincinnati. As of the end of 1950, it operated, under ownership, lease or trackage rights, over 12,000 miles of track on nearly 6,



R. B. White, present president of the B. & O.

200 miles of line. Its depreciated investment in transportation property exceeded \$700,000,000. It handled, in 1950, over 27.5 billion revenue ton-miles and nearly 704 million revenue passenger-miles; and had operating revenues of more than \$402.5 million, and a net income of over \$15 million.



No. 3430, came out of an investigation conducted by the commission's Bureau of Safety.

The evidence showed that the driver of the truck, who "could have had an unobstructed view of the track throughout a considerable distance," drove onto the crossing despite warning signs and sounds. The "truck" consisted of a tractor and semitrailer, and its total weight was 58,000 lb., including cargo.

The vehicle was owned by R. H. Fulton & Co., Lubbock, Tex., and registered in Kentucky and Tennessee. The semitrailer was of special design for transporting heavy equipment, and the cargo consisted of a power shovel weighing 26,000 lb. It was loaded at

Halls, Tenn., and was en route to Newton, Kan.

The Rock Island train involved was No. 509, the "Oklahoma Rocket," which consisted of diesel-electric locomotive and four cars of lightweight steel construction. The first two cars, a diner and coach, were articulated, and the other two, in turn, were another coach and a lounge-observation car. The train was traveling 75 m.p.h. on a stretch of track which is tangent for "several miles" on each side of the crossing.

The entire train was derailed by the collision, and the power shovel was torn from the semitrailer. The damage to the train was reported by the commission as follows:

"Two large holes were torn through the left side of the diesel-electric unit, the pilot and both trucks were torn off, and the underframe was badly damaged. Two holes were torn through the left side of the first car and the car was otherwise badly damaged. The second car was badly damaged, and the third and fourth cars were considerably damaged."

In approaching the crossing, the truck driver passed two warning signs—an "advance-warning" circular sign and a standard cross-buck sign, located, respectively, 316 ft. and 20 ft. from the intersection. As the commission summarized their testimony, the train's enginemen said that sounding of the grade-crossing whistle was begun when the train passed its crossing-whistle sign, 1,270 ft. from the intersection; and the "last blast" was completed at the crossing. Meanwhile, the bell was ringing. The weather was clear and the time was 12:35 p.m.

The enginemen saw the truck when the train was about a half-mile from the crossing, and they "assumed" it would stop if there was insufficient time for it to cross in front of the train. When the train was about 200 ft. from the crossing, however, they "became aware that the truck would not be stopped," and the engineman made an emergency application of the brakes. The collision occurred "immediately afterward" before the train's 75 m.p.h. speed could be reduced. The estimated speed of the truck was 25 m.p.h.

The driver, who survived, told the commission's investigators that he "did not recall having noticed the railroad crossing-warning signs and he was not aware that the motor truck was approaching a grade crossing until the tractor was about to cross the track." And "he did not see or hear the approaching train," the report added. The driver had been operating the same tractor-trailer combination for "several years," but he said he had not previously traveled the highway on which the accident occurred.

### Supreme Court Actions

Cases decided by the Supreme Court in recent sessions include a railroad tax controversy, a Liability Act injury case, and a proceeding involving transportation of explosives by motor vehicle. The court is now in a four-week recess, and will return March 3.

The tax case, which concerns the Georgia Railroad & Banking Co., was sent back for further proceedings in the U. S. District Court for the Northern District of Georgia. The lower court had ruled it had no jurisdiction to hear the case. The Supreme Court concluded that it did.

The proceeding involves an effort by the railroad to obtain injunctive relief against Charles D. Redwine, state revenue commissioner. The road's original charter in 1833 contained a tax-exemp-



tion provision. The Georgia Constitution was amended in 1945 to remove such exemptions from old corporate charters. Mr. Redwine then proceeded toward collecting state and local taxes.

State courts in Georgia held they could not hear the road's injunction plea on its merits because it constituted an uncontested suit against the state. The district court dismissed the case on the same grounds.

The Supreme Court, on appeal, said the district court did have jurisdiction because a suit to restrain unconstitutional action threatened by an individual who is a state officer is not a suit against the state. The high court also found that "plain, speedy and efficient remedy" necessary to deprive the district court of jurisdiction was not available to the road elsewhere.

The case of *John F. Dice v. Akron, Canton & Youngstown* was a personal injury proceeding involving the Federal Employers' Liability Act. Mr. Dice, a fireman, was injured when a locomotive in which he was riding jumped the track. The case was finally determined in favor of the employee.

Action was brought in an Ohio state court. The road had a written statement, signed by the petitioner, which purported to release the railroad in full for \$924.63. The injured man admitted he had signed several receipts for back pay, but denied he had made full settlement. He claimed the purported release was void because he signed it relying on the railroad's "deliberately false statement that the document was nothing more than a mere receipt for back wages."

The jury awarded \$25,000, but the trial judge entered judgment notwithstanding the verdict. He said the fireman was guilty of "supine negligence" in failing to read the release. The facts do not sustain allegations of fraud by "clear, unequivocal and convincing evidence," the judge said.

The next higher court in Ohio reversed the trial judge, and was, in turn, reversed by the state's supreme court. The top state court said the case was governed by Ohio law, and therefore factual issues as to fraud in the execution of the release were properly decided by the judge rather than the jury.

This latter decision was appealed direct to the U. S. Supreme Court. There the verdict in favor of the employee was restored.

"The trial judge and the Ohio supreme court erred in holding that petitioner's rights were to be determined by Ohio law and in taking away petitioner's verdict when the issues of fraud had been submitted to the jury on conflicting evidence and determined in petitioner's favor," the high court said.

In *Boyce Motor Lines v. United States*, the Supreme Court affirmed a lower court decision concerning transportation of explosives by motor vehicle. In a 6 to 3 opinion, the court

found the pertinent regulation of the Interstate Commerce Commission does establish a "reasonably certain standard of conduct."

Justices Jackson, Black and Frankfurter dissented. They said the commission should exercise "considerable precision" in prescribing rules which carry a criminal penalty. The present explosives regulation, they said, is too indefinite and vague.

The case before the court concerned the indictment of Boyce Motor Lines. A vehicle of that firm, carrying inflammable liquid, exploded in the Holland Tunnel at New York. An indictment was brought against the carrier, but the district court dismissed three counts of the indictment because the I.C.C. regulation was found to be "so vague . . . as to make the standard of guilt conjectural." The Court of Appeals reversed this and upheld the I.C.C. regulation. The Supreme Court affirmed the latter decision.

### Iowa Intrastate Rates

The Interstate Commerce Commission has found that unjust discrimination against interstate commerce has resulted from the Iowa State Commerce

Commissions' failure to authorize intrastate freight rate increases in line with those approved for interstate application in the Ex Parte 162, 166, and 168 cases.

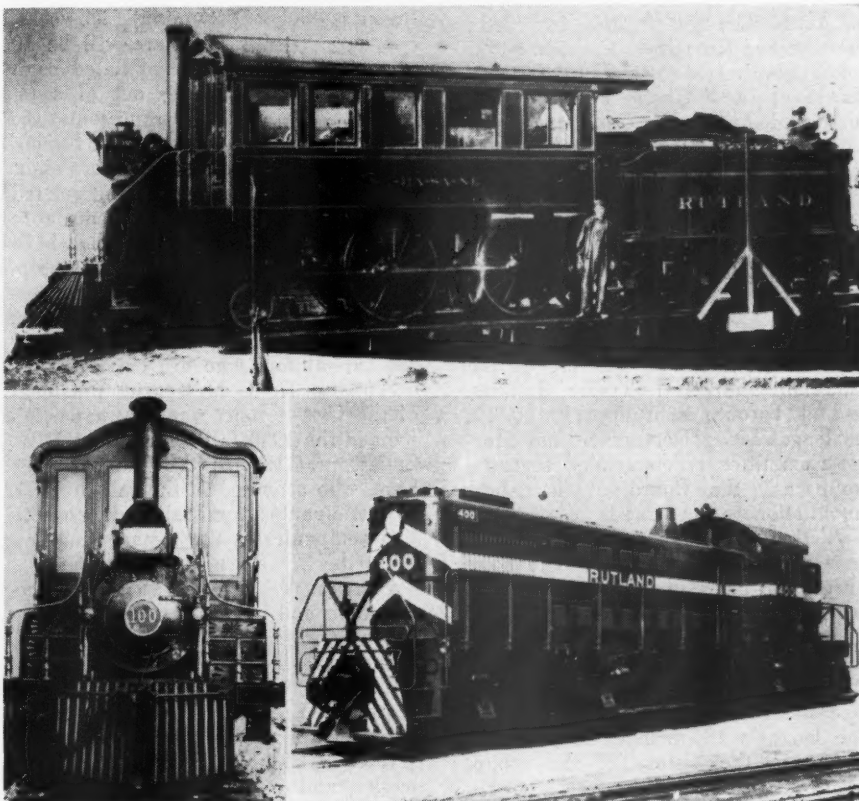
This I.C.C. finding, in the No. 30767 proceeding, applies to all Iowa rates in issue except those on sugar beets, where no unjust discrimination was found.

The commission withheld entry of an order, but said it would issue one unless the Iowa commission advised "that it will permit promptly the increases approved." The report drew a dissenting expression from Commissioner Splawn.

### R. E. Mattson Retained By Irish Railways

Robert E. Mattson, general superintendent of transportation of the Northern Pacific, has been granted a six-months' leave of absence to serve as consultant to the Coras Iompair Eireann (Irish Transport Company). He left for Dublin on February 15.

Mr. Mattson will undertake a study of the equipment, facilities and operation of Irish Transport with a view to making recommendations for more effi-



**RAILROADING ON THE RUTLAND—**as elsewhere—has undergone revolutionary changes during the past half century; their extent is emphasized by the contrast between the combination locomotive-passenger coach used on the Rutland 50-odd years ago and one of the road's new diesel-electric units. The Rutland, which installed its first diesel during 1951, has already completed

the first phase of dieselization with 12 switching and road-switching units built by the American Locomotive-General Electric Companies. Last November 29, incidentally, the Rutland marked the 100th anniversary of the first refrigerator car built for railroad use in this country; a wooden box car insulated with sawdust, first used to transport butter from Ogdensburg to Boston



cient and more profitable operation. With minor exceptions, all railway service within the Irish Free State is operated by the transport company.

During his absence, Mr. Mattson's duties will be assigned to E. S. Ulyatt, assistant general superintendent of transportation, who has been appointed acting general superintendent. E. L. Martin, assistant to the general superintendent of transportation, will, in turn, take over Mr. Ulyatt's duties.

## More "Over-the-Road" Trucking for A.C.L.

Additional "over-the-road" trucking of l.c.l. freight, between points in North Carolina and South Carolina, was inaugurated by the Atlantic Coast Line on February 16. This coordinated truck service will shorten the transit time of some shipments to and from these points from by 24 to 48 hours. Coast Line officers have stated, "and will release many freight cars now used for less-than-carload shipments to the . . . task of transporting . . . other . . . traffic."

With minor exceptions, the A.C.L.'s announcement states, points served by these new truck routes are those between Florence, S. C., and Chadbourn, N. C.; Rowland, N. C., and Pee Dee, S. C.; Florence and Cheraw; Darlington, S. C., and McColl, with stations on the Hartsville branch also included; Florence and Kingstree; Creston, S. C., and Dunbarton; Creston and Ellore; Charleston and Green Pond; Green Pond and Ehrhardt; Chadbourn and Rowland, N. C., and cross-country to Fairmont. All service will be daily except Saturday and Sunday, and trucks will make round trips daily.

## C.I.T.L. Asks Average Demurrage Agreement

At the 36th annual meeting of the Canadian Industrial Traffic League, held at Toronto February 11 and 12, the league's Car Demurrage and Storage Committee recommended that the group ask the Board of Transport Commissioners for Canada to allow introduction of the average demurrage agreement in that country. The committee also asked that the board: (1) Provide for relief from assessment of demurrage charges in the case of industrial strikes; and (2) order the railways to publish all their demurrage items in one consolidated tariff. The league's 184-member turnout, the largest in the history of the group, adopted these proposals.

The league's Bill of Lading Committee reported progress in its efforts to have a universal bill of lading introduced in Canada. A draft bill, which has been reviewed by the railways, now will be submitted to motor and water carriers. The committee indicated its opinion that the universal bill would be adopted in the near future.

Making a departure from its usual procedure, the league permitted J. A. Argo, assistant vice-president, traffic, of the Canadian National, and G. F. Buckingham, general freight traffic manager of the Canadian Pacific, to outline to the members the views of the railways on equalization of freight rates, currently under review by Canada's Transport Commissioners.

J. S. Robertson, traffic manager of the Dominion Textile Company, retiring president, presided at this meeting, which welcomed, as representatives of the (U.S.) National Industrial Traffic League, A. H. Brown, vice-president of that organization, and E. F. Lacey, executive secretary.

New officers elected by the C.I.T.L. were: President, W. J. Smallacombe, Maple Leaf Milling Company, Toronto; first vice-president, Oswald Crawford, Powell River Sales Company, Vancouver; second vice-president, W. MacDougall, Robin Hood Flour Mills, Ltd., Montreal; and treasurer, F. W. Hobbs, Anaconda American Brass, Ltd., Toronto. H. A. Mann of Toronto continues as the league's general secretary.

## Ten Railroaders in Harvard Management Course

At the forthcoming "Advanced Management Program" session at Harvard Business School, running 13 weeks, February 27-May 23, there will be 10 officers of railways and affiliated companies in attendance — out of a total participation of 150 representatives of all industry.

At last fall's session there were eight representatives of railroads and related companies. Prior to that time no more than two railroad participants had been in attendance at any one of these top-management "supercharge" courses (described in *Railway Age*, April 9, 1951, page 38). The program already has two alumni who are chief railway executives, H. J. McKenzie, president of the Cotton Belt, who was a participant in the 1950 fall session, and J. W. Smith, president of the Seaboard Air Line, who attended in the fall of 1951.

Participants from railroads and allied companies at the forthcoming session (the 21st) are as follows:

Charles V. Ahern, assistant vice-president and general manager, Pacific Fruit Express (San Francisco); T. H. Banister, vice-president, traffic, St. Louis-San Francisco (St. Louis); Matthew S. Cogan, assistant general manager, Railway Express Agency (New York); Leo J. Gosney, comptroller and general auditor, Western Pacific (San Francisco); William D. Lamprecht, assistant general manager, Southern Pacific (San Francisco); Kenneth L. Moriarty, general manager, Denver & Rio Grande Western (Denver); Irvin T. Marine, freight traffic manager, Pennsylvania (Philadelphia); Malcolm W. Roper, freight traffic manager, Western Pacific (San

Francisco); James R. Thorne, assistant vice-president, operating, Seaboard Air Line (Norfolk, Va.); William G. White, general superintendent, Delaware, Lackawanna & Western (New York).

## Rail Plea to Reopen Air Line Case Denied by C.A.B.

The Civil Aeronautics Board has turned down a railroad request for further hearings in connection with renewing the operating certificate of Mid-West Airlines.

The board ruled that the six roads making this request could participate only in remaining stages of the case, file a brief as "amici," and take part in oral argument if there is any.

Roads that had asked reopening of the Mid-West case were: Chicago, Burlington & Quincy; Chicago & North Western; Chicago, Milwaukee, St. Paul & Pacific; Chicago, Rock Island & Pacific; Chicago, St. Paul, Minneapolis & Omaha, and Union Pacific.

Mid-West Airlines operates in Minnesota, Iowa, Nebraska and South Dakota. C.A.B. Examiner James S. Keith in a January 8 report recommended that the board renew Mid-West's certificate for three years, and extend operating authority to include Denver, Colo. The line is controlled by Purdue Research Foundation, a part of Purdue University. (*Railway Age*, February 4, page 16.)

When the examiner's report was made public, the six western railroads advised the C.A.B. they would be seriously affected if the report is made final. They asked for reopened hearings and a chance to show how renewal of the certificate and extension of the line would be harmful to them.

Denying this petition, the board said such a procedure would "unduly delay and disrupt" the proceeding. It said the roads, in spite of due notice, "tardily filed their petition," and it concluded that they could only participate in the remainder of the case as "amici" of the board.

"Such an appearance may be helpful to the board because this is the first occasion on which rail carriers have evinced a desire to participate in a board proceeding involving renewal of experimental certificates of public convenience and necessity of local service air carriers," the board said.

## MORE NEWS ON PAGE 65

Additional general news appears on page 65, followed by regular news departments, which begin on the following pages:

Organizations . . . . .	66
Supply Trade . . . . .	66
Equipment and Supplies . . . . .	68
Abandonments . . . . .	68
Financial . . . . .	68
Railway Officers . . . . .	72

### REVENUES AND EXPENDITURES AND TWELVE MONTHS OF CALENDAR YEAR 1951

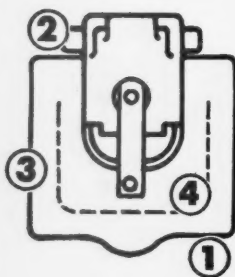
[illegible]



# "Flexo-4's sure slam the lid on hot-box worries!"



National Flexo-4 journal lids are of malleable iron construction carefully designed to seal the front end of the box from dirt, and retain the oil. Each Flexo-4 lid offers 4 big advantages:



- 1** LONG LIFE—malleable iron construction resists corrosion, shock, distortion . . . lasts through the years.
- 2** FLEXIBLE FIT—spring controlled...compensates for variations and wear of journal-box mouth and hinge lug.
- 3** TIGHT FIT—keeps oil in and dirt and water out.
- 4** POSITIVE OIL RETURN—oil return ledge feeds oil into the box instead of letting it seep out of journal box . . . improves lubrication.

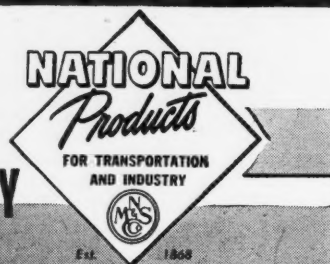
FOR ALL NEW CARS AND REPLACEMENTS, SPECIFY NATIONAL FLEXO-4 LIDS.

NATIONAL MALLEABLE AND STEEL CASTINGS COMPANY, CLEVELAND 6, OHIO.

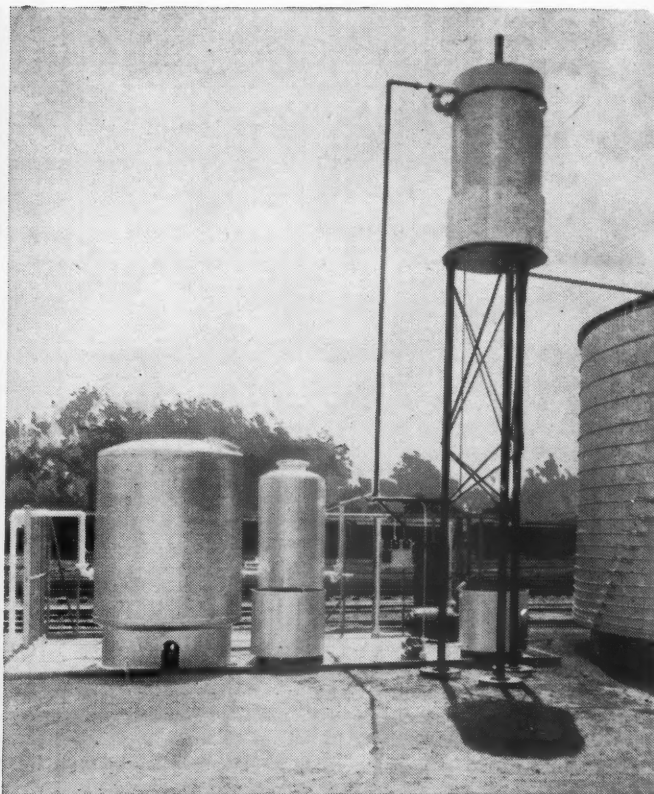
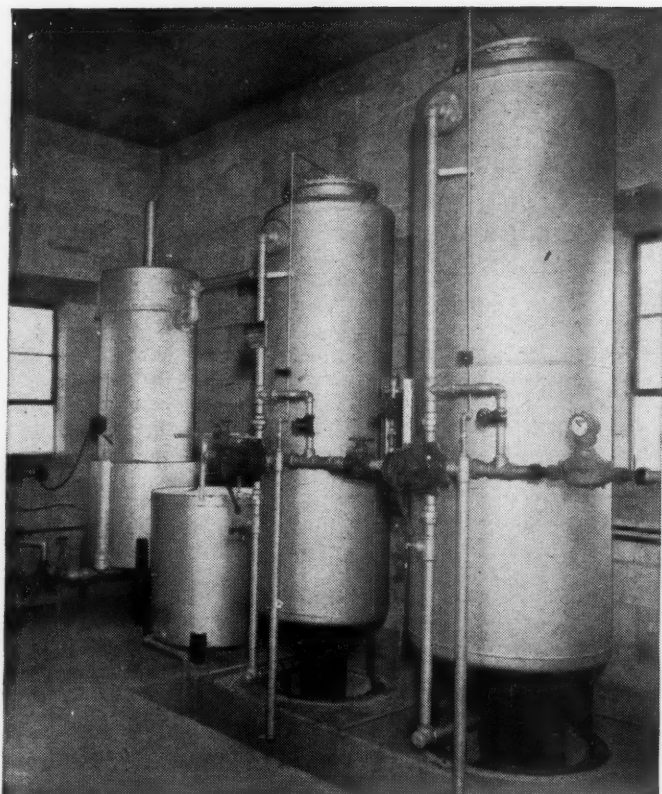
A-3572

## NATIONAL MALLEABLE and STEEL CASTINGS COMPANY

COUPLERS • TRUCKS • YOKES • DRAFT GEARS • JOURNAL BOXES AND LIDS







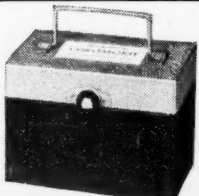
## A DEARBORN DE-IONIZING SYSTEM TO MEET THE COMPLETE NEEDS OF YOUR RAILROAD

A Dearborn De-Ionizing system will provide the mineral-free water you need at less than 10 percent the cost of distilled water.

This mineral-free water, when conditioned with Dearborn formula 517, will provide proper Diesel cooling . . . eliminate mechanical failure of liners, heads and blocks caused by corrosion, scale and sludge deposits. This combination will protect cooling systems of engine-driven auxiliary generators and radiators of trucks, buses, scrapers, graders, caterpillars. Dearborn De-Ionizing sys-

tems will also produce mineral-free water for storage batteries and adequate supplies of scale-free, non-corrosive water for Diesel steam generators.

A Dearborn engineer will discuss a De-Ionizing system to meet the requirements of your operation. The only information required is: (1) Analysis (or sample) of raw water; (2) quantity and quality of mineral-free water required; (3) available space for equipment; (4) raw water pressure and size of supply line; (5) available power characteristics.



**HAVE YOU REQUISITIONED  
YOUR DEARBORN CHROMOKIT?**

*It provides a fast, simple, accurate and economical way to determine the chromate content of your Diesel cooling water. Only \$7.50 each.*

**DEARBORN CHEMICAL COMPANY**  
Merchandise Mart Plaza • Chicago 54, Illinois

### INFORMATION ON DE-IONIZING SYSTEMS

*A copy of "Dearborn De-Ionizing Systems," containing valuable information about how to secure the mineral-free water you need, will be sent upon request.*



Dearborn Chemical Company  
Dept. RA, Merchandise Mart Plaza  
Chicago 54, Ill.

- ( ) Please send booklet "Dearborn De-Ionizing Systems"  
( ) Have a Dearborn Engineer call.

Name.....

Company.....

Address.....

City.....Zone....State....

# Dearborn

TRADE MARK REGISTERED

THE LEADER IN WATER TREATMENT AND RUST PREVENTIVES

# REVENUES AND EXPENSES OF RAILWAYS

MONTH OF DECEMBER AND TWELVE MONTHS OF CALENDAR YEAR 1951

Name of road	Av. mileage operated during period	Operating revenues				Operating Expenses				Operating ratio	Net from operation	Net railway operating income	
		Freight	Passenger	Total (inc. misc.)	Way and structures	Equipment	Traffic	Transportation	Total			Railway tax accruals	1949
Colorado & Southern.....	736	1,381,343	85,737	1,467,080	142,920	233,032	29,172	489,537	948,622	48.0	1,028,222	701,443	286,967
.....	738	14,008,671	1,055,723	15,064,394	1,742,167	2,340,866	329,232	6,007,274	11,308,540	67.8	5,382,587	3,518,574	1,864,013
Ft. Worth & Denver.....	804	2,075,019	183,074	2,258,093	300,413	265,737	57,418	683,136	1,402,074	50.2	7,198,127	4,777,434	2,420,693
.....	804	17,952,654	1,933,446	19,886,100	2,922,582	2,850,737	648,112	7,926,136	15,484,874	70.5	6,489,854	2,323,514	4,166,340
Colorado & Wyoming.....	41	181,025	.....	181,025	110,177	38,726	1,183	121,955	66,172	23.6	213,721	154,905	58,816
.....	41	1,881,832	.....	1,881,832	429,777	354,061	13,847	1,426,515	2,357,759	71.4	942,226	597,378	344,848
Columbus & Greenville.....	168	186,911	.....	186,911	40,181	27,394	4,483	52,686	118,546	76.0	47,012	41,175	6,837
.....	168	2,077,244	1,096	2,078,340	534,462	346,987	45,048	632,598	1,772,449	85.3	304,795	267,198	37,597
Delaware & Hudson.....	793	4,378,010	162,711	4,540,721	621,441	750,037	76,375	1,911,422	3,566,721	77.2	1,304,542	864,944	439,598
.....	793	55,205,996	1,921,600	57,127,596	7,905,008	12,425,282	940,355	22,325,445	45,965,215	77.8	13,118,665	6,580,294	6,538,371
Delaware, Lackawanna & Western.....	965	5,747,101	922,889	6,669,990	856,821	794,458	200,580	3,473,198	5,629,608	67.5	2,708,148	780,261	1,927,887
.....	965	71,474,264	9,725,061	81,199,325	9,957,661	16,442,212	2,108,144	40,228,753	71,892,826	80.2	17,728,414	9,303,069	8,425,345
Denver & Rio Grande Western.....	2,333	6,194,633	319,106	6,513,739	535,430	1,080,594	194,741	2,216,705	4,297,924	62.4	2,588,164	1,556,530	1,031,634
.....	2,333	71,239,399	3,631,002	74,870,401	12,943,932	24,374,228	2,474,228	24,374,228	52,341,396	67.3	25,448,728	13,789,464	11,659,264
Detroit & Mackinac.....	232	164,310	148	164,458	89,277	17,438	5,427	44,316	169,793	10.0	1,026,973	597,858	429,115
.....	232	2,498,300	855	2,583,155	674,277	249,342	46,567	668,653	1,558,169	54.5	1,026,973	597,858	429,115
Detroit & Toledo Shore Line.....	50	664,354	.....	664,354	668,245	706,245	13,338	2,503,200	4,425,228	58.2	2,652,240	1,142,838	1,509,402
.....	50	7,555,905	.....	7,555,905	899,956	706,245	166,260	2,503,200	4,425,228	58.2	3,171,798	1,142,838	2,028,960
Detroit, Toledo & Ironton.....	464	1,351,883	620	1,971,903	165,592	235,741	25,237	395,826	865,862	61.2	549,472	253,044	296,428
.....	464	17,679,347	5,294	17,684,641	2,466,093	3,198,130	329,548	5,065,072	11,613,980	62.7	6,903,069	3,622,286	3,280,783
Duluth, Missabe & Iron Range.....	567	1,114,412	1,088	1,115,500	746,178	776,689	8,496	1,941,946	3,269,679	246.1	1,941,334	1,665,958	275,376
.....	567	48,953,391	18,844	48,972,235	7,462,830	8,594,803	104,709	20,938,237	38,939,490	67.8	18,255,459	13,168,707	5,086,752
Duluth, South Shore & Atlantic.....	539	477,936	7,909	485,845	83,933	148,562	21,609	277,828	550,154	107.0	35,769	27,168	8,601
.....	539	7,480,245	89,815	7,570,060	1,412,833	1,551,595	256,792	3,183,172	6,621,027	82.9	1,370,084	336,786	1,033,298
Duluth, Winnipeg & Pacific.....	175	658,063	1,474	659,537	103,311	61,509	5,907	235,842	417,431	61.0	266,950	393,262	77,688
.....	175	5,276,063	13,174	5,289,237	910,996	888,964	55,772	2,270,956	4,172,451	77.6	1,206,730	403,168	803,562
Elgin, Joliet & Eastern.....	238	3,514,229	34	3,514,263	430,106	689,378	376,695	1,948,577	2,932,523	66.9	1,453,074	397,662	1,055,412
.....	238	43,937,993	95	43,938,088	5,147,754	7,961,890	376,695	19,476,780	24,624,574	63.5	20,026,574	9,880,848	10,145,726
Erie.....	2,242	12,604,777	740,500	13,345,277	1,667,311	496,437	320,917	5,818,470	9,026,648	61.3	5,708,146	1,436,151	4,271,995
.....	2,242	157,912,786	7,386,750	165,299,536	23,217,733	26,687,623	4,064,672	72,787,378	134,989,353	75.5	43,887,890	18,437,252	25,450,638
Florida East Coast.....	571	2,071,793	660,316	2,732,109	367,378	545,909	72,812	1,240,393	3,387,781	81.3	549,712	172,774	376,938
.....	571	20,631,373	6,509,346	27,140,719	4,214,052	5,353,492	829,243	11,663,756	23,072,980	80.7	5,759,886	1,908,663	3,851,223
Georgia Railroad.....	321	8,719,556	43,547	8,763,103	119,261	113,574	31,602	332,669	632,740	76.9	189,914	41,866	148,048
.....	321	8,319,480	652,317	8,971,797	1,442,927	1,442,927	373,819	3,483,933	7,520,973	71.7	2,164,292	438,722	1,725,571
Georgia & Florida.....	359	242,009	13	242,022	30,059	31,021	4,922	69,325	107,161	71.7	69,861	23,196	46,665
.....	359	3,304,609	213	3,304,822	916,438	399,395	220,553	1,033,945	2,731,461	81.0	642,643	210,322	432,321
Grand Trunk Western.....	952	4,416,375	282,111	4,698,486	574,046	987,732	74,940	2,180,065	3,993,798	73.5	1,443,920	67,374	1,376,526
.....	952	50,319,375	2,479,111	52,798,486	8,643,216	10,022,216	854,700	25,239,546	46,773,005	81.4	10,600,313	3,031,276	7,569,037
Canadian Natl. Lines in New Engl.....	172	9,909,965	6,846	9,916,811	1,836,669	2,022,192	1,507	2,539,544	4,573,952	102.2	5,382,859	1,520,736	3,862,123
.....	172	2,234,965	6,846	2,241,811	700,338	601,231	31,539	1,438,478	2,539,544	115.2	429,352	38,660	390,692
Great Northern.....	8,314	14,888,221	1,093,844	15,982,065	2,406,830	3,276,064	36,953	7,581,796	14,471,597	80.5	3,405,412	2,275,289	1,129,123
.....	8,314	215,627,820	13,497,834	229,125,654	42,045,531	41,047,070	4,470,583	87,253,503	184,210,066	74.3	63,828,623	36,850,616	26,967,967
Green Bay & Western.....	224	272,068	.....	272,068	45,987	45,987	19,695	87,195	148,355	53.2	130,339	65,592	64,747
.....	224	3,644,188	.....	3,644,188	949,200	520,293	246,313	1,024,676	2,918,375	73.2	1,090,325	548,029	542,296
Gulf, Mobile & Ohio.....	2,877	6,754,141	557,393	7,311,534	1,292,707	446,661	261,126	2,139,496	4,545,799	54.2	3,842,859	1,520,736	2,322,123
.....	2,877	76,841,704	5,321,795	82,163,499	14,430,049	15,840,191	3,066,692	26,194,757	63,677,038	71.8	25,007,066	11,235,039	13,772,027
Illinois Central.....	6,539	20,738,608	2,208,648	22,947,256	2,949,714	2,907,154	5,099,437	9,678,372	17,013,514	61.3	10,745,385	5,451,927	5,293,458
.....	6,539	243,126,280	23,297,626	266,423,906	46,591,232	49,805,212	5,989,437	108,734,962	223,346,134	75.7	71,745,656	36,309,777	35,435,879
Illinois Terminal.....	462	834,584	95,710	930,294	141,175	163,163	38,641	426,640	820,635	75.9	260,273	156,667	103,606
.....	462	10,227,939	986,434	11,214,373	1,853,436	1,858,395	456,084	5,109,651	9,296,365	72.7	2,828,097	1,444,774	1,383,323
Kansas City Southern.....	891	9,795,000	178,734	9,973,734	535,993	645,042	99,153	1,182,837	2,596,365	77.4	988,440	371,983	616,457
.....	891	38,535,612	1,708,315	40,243,927	4,737,251	5,549,499	992,705	13,221,254	25,895,608	58.8	18,165,628	8,436,983	9,728,645
Kansas, Oklahoma & Gulf.....	327	581,470	.....	581,470	72,663	76,989	34,759	170,864	385,230	64.7	210,011	99,478	110,533
.....	327	6,615,468	7,166	6,622,634	896,439	455,202	264,145	1,571,137	3,458,512	51.7	3,229,704	1,514,091	1,715,613
Lake Superior & Ishpeming.....	156	39,387	.....	39,387	80,957	72,174	6,331	81,974	254,500	607.8	212,628	73,415	139,213
.....	156	3,691,693	389	3,692,082	713,463	622,491	25,399	1,305,235	2,822,020	63.6	1,615,584	1,042,376	573,208
Lahigh & Hudson River.....	96	248,633	.....	248,633	36,828	29,505	12,547	84,934	176,195	72.7	66,308	13,171	53,137
.....	96	3,253,434	.....	3,253,434	502,407	315,230	133,585	990,759	2,064,352	63.1	1,209,242	476,521	732,721
Lahigh & New England.....	184	636,706	.....	636,706	120,077	146,881	14,688	188,481	344,854	69.8	192,388	92,336	100,052
.....	184	8,835,991	.....	8,835,991	1,115,030	1,365,464	144,051	2,305,861	5,348,818	59.9	3,573,967	1,659,457	1,914,511
Lahigh Valley.....	1,220	5,653,442	453,882	6,107,324	1,603,519	558,668	136,877	2,558,688	3,988,789	57.6	2,948,263	1,110,095	1,838,168
.....	1,220	71,155,901	4,039,676	75,195,577	11,086,937	14,294,263	1,652,732	30,704,344	60,675,309	76.7	18,474,465	7,031,042	10,443,323
Long Island.....	365	1,153,086	2,902,301	4,055,387	234,735	804,998	2,823	6,716,454	7,952,337	182.8	3,602,470	424,067	3,178,403
.....	365	15,200,157	35,517,553	50,717,710	6,815,258	9,935,384	149,728	32,612,970	51,476,645	95.2	2,615,315	5,428,073	2,812,242

Continued on next left-hand page.



# Railroad telephones designed for specific uses...

by

## Automatic Electric



**type 40  
monophone**

**5 separate and distinct  
models to meet every  
railroad requirement**

### modern • stream-lined for office use

Streamlined, durable black plastic housing. Rubber cushioned base-plate grips desk surface—prevents sliding, scratching. Connects to dispatcher's lines. Supplied with or without ringer in base.

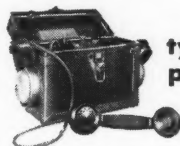
**mounts anywhere—ideal  
for dispatcher's circuits**



**type 43  
monophone**

Complete self-contained for dispatcher's use including CTC (Centralized Traffic Control) operations. "Knockout" holes in case make it easy to mount on edge of desk, on wall, or on a post. Case is only 6 $\frac{1}{2}$ " high, 3 $\frac{1}{4}$ " deep, and 6 $\frac{3}{8}$ " wide.

**for track inspectors  
and signal crews**



**type 10  
portable**

The perfect portable unit—connects to any circuit. Weighs only 10 $\frac{1}{2}$  pounds with optional ringer. Handset fits securely in case—won't bounce around. Ringer (when used) is built to take hardest usage.

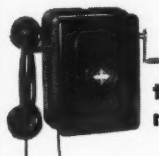
**complete telephone for  
wayside booths**



**self  
contained  
booth  
monophone**

Compact, self-contained—ready to mount as a single unit. Easy to use without removing gloves. No awkward reaching—push-to-talk button conveniently located on handset itself. Uses only two batteries.

**for wall mounting on cars,  
siding booths**



**type 60  
monophone**

Modern, ruggedly built housing of die formed metal protects internal parts. Push-to-talk button on handset. Requires little wall space. Only 9 $\frac{3}{4}$ " high, 11 $\frac{1}{2}$ " wide, and 5" deep.

... in the offices and shops

... throughout the yards

... all along the right of way

Here is a *complete* line of specialized telephones... each one precisely engineered for a specific railroad use... each using the exclusive Automatic Electric circuit.

This unique circuit assures crisp, clear transmission on longer lines—permits a greater number of stations on the line. It provides the same impedance for both transmission and reception, thus eliminates the need of adding padding resistors to telephones to compensate for voice-frequency repeaters on the line.

Although each of the Automatic Electric telephones is made for a specific use, *all* have the same standard components. You have only one set of parts to stock and only one circuit to service. Maintenance problems are minimized—costs are reduced!

For complete information on these five specialized railroad telephones, ask for Circular 1697-A. For ALL communication needs, simply write Automatic Electric.

**AUTOMATIC ELECTRIC**

Makers of Telephone, Signaling and Communication Apparatus... Electrical Engineers, Designers and Consultants

Distributors in U.S. and Possessions:

Automatic Electric Sales Corporation... 1033 West Van Buren Street, Chicago 7, U. S. A.  
In Canada: Automatic Electric (Canada) Limited... 284 King Street West, Toronto, Ontario

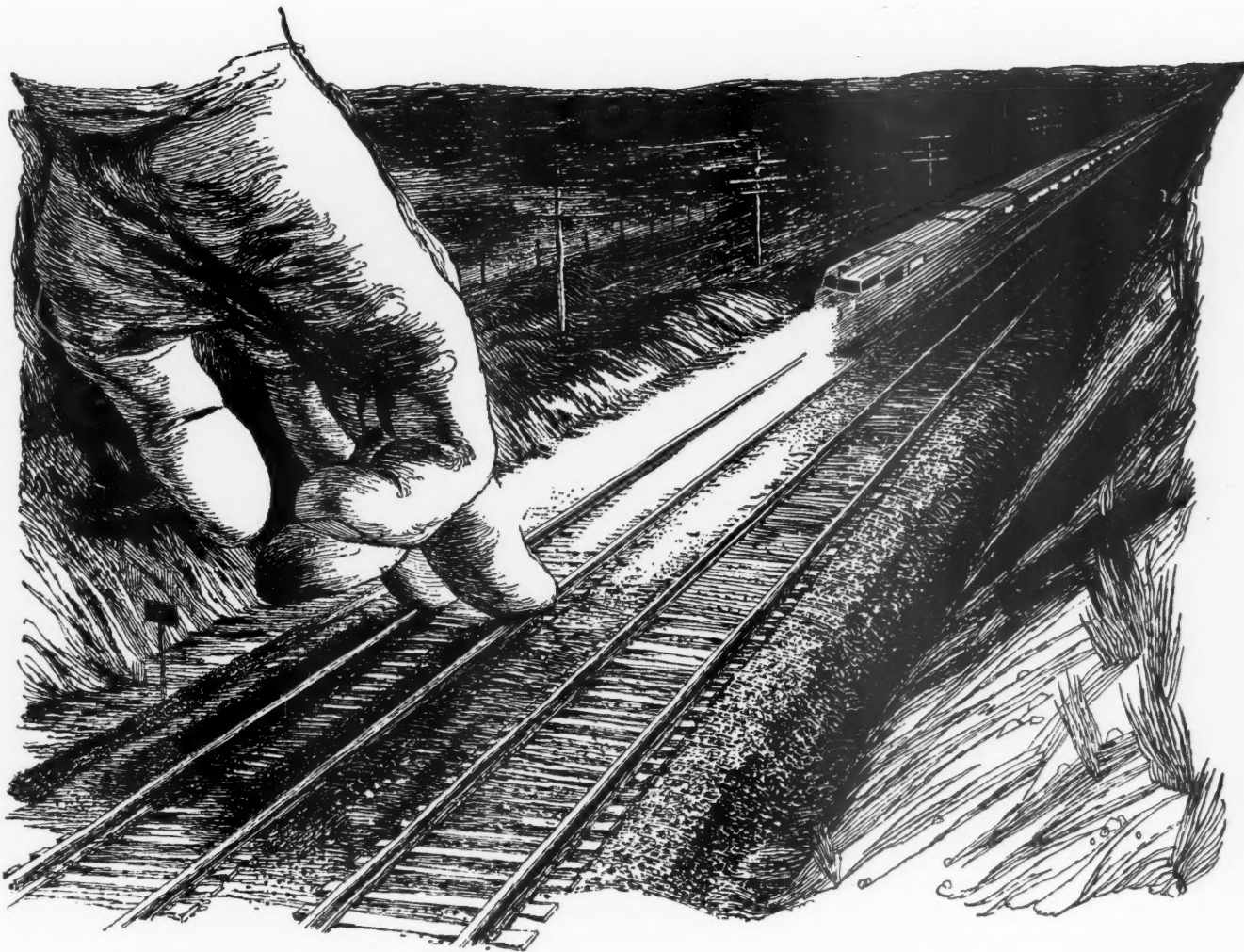
# REVENUES AND EXPENSES OF RAILWAYS

MONTH OF DECEMBER AND TWELVE MONTHS OF CALENDAR YEAR 1951

Name of road	Av. mileage operated during period	Operating revenues			Maintenance of			Operating Expenses			Operating ratio	Net from railway operation	Net railway operating income	
		Freight	Passenger	Total (inc. misc.)	Way and structures	Equipment	Traffic	Transportation	Total	Railway tax accruals			1951	1950
Louisiana & Arkansas.....	Dec. 12 mos.	2,130,191	60,100	2,190,291	233,136	523,908	77,569	704,115	1,600,975	69.0	717,840	378,226	286,657	28,457
Louisville & Nashville.....	Dec. 12 mos.	22,666,193	716,203	23,382,396	4,134,956	3,272,531	810,513	6,950,691	16,020,756	63.9	8,295,618	3,780,195	3,092,864	3,611,136
Louisville & Nashville.....	Dec. 12 mos.	756	1,582,338	20,603,528	2,754,285	3,843,788	336,740	6,521,461	14,111,337	68.5	6,492,191	3,074,454	3,925,543	1,925,267
Maine Central.....	Dec. 12 mos.	17,263,119	14,804,986	226,475,041	31,745,580	47,679,690	3,929,294	82,851,707	173,992,164	76.8	52,482,877	35,133,990	24,339,950	26,031,375
Maine Central.....	Dec. 12 mos.	981	1,815,892	158,121	2,373,782	569,487	19,837	828,603	1,887,153	79.5	486,629	263,361	214,567	429,573
Maine Central.....	Dec. 12 mos.	22,809,469	1,581,480	26,281,240	5,169,170	4,574,069	239,115	9,101,851	19,975,999	76.0	6,305,241	3,407,132	2,548,313	2,339,636
Midland Valley.....	Dec. 12 mos.	175,014	6	178,016	36,353	31,822	6,296	71,994	155,948	87.6	22,068	9,433	11,777	14,672
Midland Valley.....	Dec. 12 mos.	334	2,067,880	75	2,103,836	568,038	231,898	726,785	1,667,244	79.2	436,392	198,271	113,055	14,518
Minneapolis & St. Louis.....	Dec. 12 mos.	1,406	1,629,029	6,572	1,715,791	333,284	124,187	579,048	1,409,445	64.1	613,846	359,178	208,069	184,323
Minneapolis & St. Louis.....	Dec. 12 mos.	3,994	20,969,137	123,375	21,893,507	3,663,312	3,065,470	7,038,815	16,474,446	73.2	5,108,864	2,588,368	1,508,071	2,595,329
Minneapolis & St. Louis.....	Dec. 12 mos.	3,224	2,534,569	82,465	2,617,034	2,809,714	3,065,470	1,445,506	7,038,815	103.9	6,435,884	3,221,236	2,709,277	2,399,742
Mississippi Central.....	Dec. 12 mos.	148	241,278	392	241,670	43,523	37,632	12,545	67,343	69.3	75,344	34,952	23,123	23,951
Mississippi Central.....	Dec. 12 mos.	148	2,605,754	Dr.	2,605,754	528,748	352,305	155,926	702,303	69.7	803,993	392,358	276,035	265,197
Missouri-Illinois.....	Dec. 12 mos.	172	5,370,388	146	5,370,534	77,158	81,116	112,655	172,314	72.0	106,624	59,045	58,627	22,288
Missouri-Illinois.....	Dec. 12 mos.	172	5,176,191	2,366	5,250,440	833,798	783,351	95,962	1,430,112	61.8	2,006,972	1,268,009	824,580	828,741
Missouri-Kansas-Texas.....	Dec. 12 mos.	3,242	5,660,707	532,580	7,419,438	891,727	865,492	240,422	4,697,563	63.3	2,721,875	1,347,406	1,093,925	1,104,196
Missouri-Kansas-Texas.....	Dec. 12 mos.	3,242	66,536,062	5,145,423	78,828,267	11,610,891	11,188,163	2,926,384	29,606,642	75.0	19,671,801	9,063,869	7,176,448	9,096,750
Missouri Pacific.....	Dec. 12 mos.	6,950	16,473,870	1,279,141	22,264,401	4,152,755	4,394,105	442,625	8,096,776	79.7	4,524,569	1,146,944	2,609,705	6,417,256
Missouri Pacific.....	Dec. 12 mos.	6,956	202,824,081	12,502,584	239,345,626	42,651,023	46,491,203	5,325,093	91,092,678	80.7	46,163,785	15,897,061	23,961,994	31,659,212
Gulf Coast Lines.....	Dec. 12 mos.	1,727	3,122,030	89,697	3,655,363	615,581	561,722	86,781	1,232,100	72.1	1,018,271	370,419	419,344	239,280
Gulf Coast Lines.....	Dec. 12 mos.	1,727	39,862,593	1,240,227	43,775,446	8,646,257	6,564,910	1,022,447	14,636,943	74.5	11,161,799	4,068,455	4,498,505	5,066,381
International-Great Northern.....	Dec. 12 mos.	1,104	2,518,154	270,147	3,296,718	623,175	621,992	56,714	1,299,051	82.9	564,351	137,839	288,625	1,022,441
International-Great Northern.....	Dec. 12 mos.	1,104	32,123,742	2,669,867	38,252,366	7,735,860	6,587,756	662,400	15,083,191	82.8	6,576,572	1,653,970	3,154,769	3,728,237
Monongahela.....	Dec. 12 mos.	178	707,128	710,307	90,930	84,406	1,168	316,891	500,144	70.4	210,163	143,516	83,059	79,614
Monongahela.....	Dec. 12 mos.	178	8,962,934	Dr.	8,962,934	1,088,843	1,054,487	14,319	3,248,134	61.0	3,512,746	883,097	845,841	344,599
Montour.....	Dec. 12 mos.	51	196,669	197,256	17,608	78,298	905	86,401	192,486	97.6	4,770	23,467	53,421	41,257
Montour.....	Dec. 12 mos.	51	2,690,402	2,696,811	329,366	1,067,527	10,852	1,084,078	2,596,372	96.3	1,004,339	488,287	395,436	597,127
Nashville, Chattanooga & St. Louis.....	Dec. 12 mos.	1,032	2,710,098	209,408	3,386,222	434,809	5,444,924	1,350,947	13,597,039	67.9	1,085,400	Cr 67,077	1,162,500	747,704
Nashville, Chattanooga & St. Louis.....	Dec. 12 mos.	1,045	32,862,631	2,081,099	38,475,942	6,691,119	5,644,924	1,130,947	28,668,149	74.5	9,807,793	5,416,166	4,550,508	5,157,705
New York Central.....	Dec. 12 mos.	10,725	44,438,680	12,645,934	68,003,475	7,608,931	8,098,012	897,296	33,695,194	79.0	14,302,087	4,140,359	8,893,695	4,811,057
New York Central.....	Dec. 12 mos.	10,726	585,948,301	122,777,516	708,725,817	107,312,825	159,458,893	12,428,490	371,754,755	85.3	118,260,970	60,088,555	40,049,934	37,475,423
Pittsburgh & Lake Erie.....	Dec. 12 mos.	221	3,572,439	106,063	3,912,271	287,710	70,191	1,334,464	624,392	16.0	3,287,879	313,853	3,685,355	436,119
Pittsburgh & Lake Erie.....	Dec. 12 mos.	221	45,717,820	997,113	49,020,389	5,835,549	13,508,819	864,409	17,179,005	81.5	9,086,989	7,826,012	9,980,784	7,257,719
New York, Chicago & St. Louis.....	Dec. 12 mos.	2,188	12,557,077	193,855	12,750,932	1,820,296	1,382,958	300,237	5,050,205	68.6	4,131,657	1,842,787	1,893,858	2,189,895
New York, Chicago & St. Louis.....	Dec. 12 mos.	2,191	153,111,222	2,101,296	160,705,508	18,602,662	26,074,649	3,657,372	56,676,462	68.6	50,400,066	23,582,583	22,393,896	25,189,537
New York Central.....	Dec. 12 mos.	1,793	7,204,398	4,949,244	15,668,459	1,991,056	2,084,328	160,173	5,871,387	69.7	4,751,967	2,333,680	1,504,229	1,229,841
New York Central.....	Dec. 12 mos.	1,794	91,990,299	49,266,308	159,105,404	23,801,112	25,536,220	2,230,761	67,564,482	80.0	31,756,678	12,949,013	7,896,637	10,902,811
New York Connecting.....	Dec. 12 mos.	542	1,016,687	1,031,856	2,048,543	51,274	19,810	.....	72,334	14.2	885,669	140,639	750,973	125,243
New York Connecting.....	Dec. 12 mos.	542	3,813,626	.....	3,813,626	1,277,795	221,617	.....	916,605	92.9	38,211	32,928	51,974	28,056
New York, Ontario & Western.....	Dec. 12 mos.	542	523,717	8	523,725	541,494	85,511	26,096	251,768	92.9	38,211	32,928	51,974	28,056
New York, Ontario & Western.....	Dec. 12 mos.	542	6,914,615	72,021	7,258,528	1,396,895	1,036,676	313,424	3,370,039	89.4	772,155	443,423	455,327	518,245
New York, Susquehanna & Western.....	Dec. 12 mos.	120	374,976	40,433	433,902	63,418	65,802	11,517	191,408	83.0	73,867	23,426	21,026	2,857
New York, Susquehanna & Western.....	Dec. 12 mos.	120	4,721,609	457,531	5,179,140	666,413	676,558	101,989	2,308,075	74.9	1,361,833	389,949	542,700	492,472
Norfolk & Western.....	Dec. 12 mos.	2,135	16,032,074	624,688	18,155,687	2,519,720	2,552,171	281,753	5,465,901	63.6	6,611,319	5,045,435	2,454,341	3,394,098
Norfolk & Western.....	Dec. 12 mos.	2,135	190,814,109	6,067,881	206,595,433	27,319,472	39,026,989	3,412,744	61,218,989	66.9	68,337,101	49,426,139	29,955,743	29,058,687
Norfolk Southern.....	Dec. 12 mos.	643	993,467	.....	1,017,433	157,171	48,960	323,471	820,810	80.7	196,623	94,137	80,024	40,050
Norfolk Southern.....	Dec. 12 mos.	643	11,260,730	1,371	11,612,722	2,190,487	1,456,998	556,953	3,742,112	75.9	2,798,883	1,383,925	852,746	686,848
Northern Pacific.....	Dec. 12 mos.	6,887	12,727,499	741,034	15,977,472	2,158,365	2,440,360	290,208	5,398,601	68.8	4,979,888	3,075,796	2,201,035	2,864,335
Northern Pacific.....	Dec. 12 mos.	6,887	152,939,679	7,582,061	173,747,860	27,144,456	32,947,117	3,379,188	65,692,066	78.9	36,604,854	24,399,528	16,331,460	22,689,706
Northwestern Pacific.....	Dec. 12 mos.	331	817,039	4,856	821,895	810,425	1,085,344	5,452	404,468	97.6	19,224	Cr 161,123	86,280	96,227
Northwestern Pacific.....	Dec. 12 mos.	331	11,205,604	51,198	11,591,376	2,830,339	1,194,882	58,998	5,007,950	80.1	2,307,613	759,192	456,720	503,305
Oklahoma City-Ada-Tulsa.....	Dec. 12 mos.	132	96,822	.....	97,770	4,216	2,344	51,979	82,065	83.9	2,376	2,376	2,083	30,857
Oklahoma City-Ada-Tulsa.....	Dec. 12 mos.	132	1,178,254	.....	1,188,906	265,736	53,888	20,679	287,174	56.8	513,900	204,964	171,218	59,454
Pennsylvania.....	Dec. 12 mos.	10,120	59,262,389	15,720,253	93,024,481	9,435,897	21,063,191	1,087,061	43,319,900	84.6	14,334,385	5,105,583	5,807,104	4,908,527
Pennsylvania.....	Dec. 12 mos.	10,126	783,634,611	156,148,680	1,044,387,274	127,693,500	253,907,569	15,275,157	457,847,981	85.5	151,441,584	69,215,766	59,519,986	57,873,351

Continued on next left-hand page.





## Clearing the track of clickety-clack

You ride in comfort on longer-lasting rails because the song of the track is being stilled

Like the paddleboat whistle on the river, the clickety-clack of wheels on rails is on its way to becoming a memory.

This familiar clatter and chatter has been like music to some of us when we travel. But it's been a headache to others . . . particularly our railroads.

Wheels pounding on rail joints cause jolting and wear as well as noise. And wear means expensive repair or replacement of rails and the bars that connect them.

**ELIMINATING RAIL JOINTS**—"Ribbonrail" is becoming important news because it provides a way to solve the high cost of joint maintenance by eliminating the joints themselves.

**RAILS BY THE MILE**—"Ribbonrail" is formed by welding the rails together under pressure in the controlled heat of oxy-acetylene flames. The welding is done on the job before the rails are laid . . . and they become continuous ribbons of steel up to a mile or more in length.

Mile-long lengths of rail in use may seem impossible because of expansion and contraction under extreme changes in weather and temperature. "Ribbonrail" engineering has solved this problem . . . reduced rail maintenance cost, and created the comfort of a smoother, quieter ride.

**A UCC DEVELOPMENT**—"Ribbonrail" is a development of the people of Union Carbide. It is another in the long list of achievements they have made during 40 years of service to the railroads of America.

**FREE:** If you would like to know more about "Ribbonrail," send for the illustrated booklets "Continuous Rail—A Challenge to the Engineer," and "90 Miles of Continuous Welded Rail." Ask for booklets B3 and B4.

**UNION CARBIDE**  
AND CARBON CORPORATION  
30 EAST 42ND STREET  NEW YORK 17, N. Y.

—UCC's Trade-marked Products of Alloys, Carbons, Chemicals, Gases, and Plastics include—

PREST-O-LITE Acetylene • LINDE Oxygen • PRESTONE and TREK Anti-Freezes • BAKELITE, KRENE, and VINYLITE Plastics • SYNTHETIC ORGANIC CHEMICALS  
NATIONAL Carbons • ACHESON Electrodes • PYROFAX Gas • HAYNES STELLITE Alloys • ELECTROMET Alloys and Metals • EVEREADY Flashlights and Batteries

# REVENUES AND EXPENSES OF RAILWAYS

MONTH OF DECEMBER AND TWELVE MONTHS OF CALENDAR YEAR 1951

Name of road	Av. mileage operated during period	Operating revenues			Operating expenses			Operating ratio	Net from railway operation		Net railway operating income
		Fright	Passenger	Total (inc. misc.)	Way and structures	Maintenance of equipment	Traffic		Total	Portation	
Pennsylvania-Reading Seashore Lines.....	Dec. 364	550,153	112,109	759,607	328,929	103,919	8,363	131.7	1,000,437	530,335	1951
Pittsburgh & Shawmut.....	Dec. 365	7,568,605	2,431,916	10,535,380	2,699,987	1,152,951	12,821	109.0	11,488,324	7,074,815	1950
Pittsburgh & West Virginia.....	Dec. 97	2,353,551	174,470	2,528,021	2,365,564	404,674	3,549	47.2	82,303	65,819	1951
Reading.....	Dec. 132	8,580,587	666,816	9,247,403	1,054,416	198,102	46,937	77.8	1,840,735	679,606	1950
Richmond, Fredericksburg & Potomac.....	Dec. 1,322	10,170,137	678,275	12,643,264	1,614,089	2,196,739	579,569	85.0	7,140,151	2,383,220	1951
Rutland.....	Dec. 1,118	11,548,296	7,007,606	13,177,889	19,484,936	26,656,585	1,701,739	57.0	7,212,690	4,638,192	1950
Sacramento Northern.....	Dec. 401	17,404,742	6,880,496	24,285,238	3,340,358	248,045	20,880	45.2	1,366,100	691,698	1951
St. Louis-San Francisco.....	Dec. 271	3,211,681	211,681	3,423,362	73,785	79,646	17,095	63.1	17,442,937	8,617,322	1950
St. Louis, San Francisco & Texas.....	Dec. 4,609	337,625	31,110	368,735	984,631	986,042	187,906	105.7	439,054	38,322	1951
St. Louis Southwestern Lines.....	Dec. 1,569	5,513,756	47,572	5,988,290	871,102	573,849	163,949	57.8	3,161,339	1,665,141	1950
Seaboard Air Line.....	Dec. 4,146	10,515,121	14,377,084	24,892,205	2,494,008	2,626,228	4,201,105	61.0	4,044,193	4,538,962	1951
Southern.....	Dec. 6,306	20,352,661	1,575,152	21,927,813	3,134,339	2,957,616	412,686	74.5	38,125,242	16,714,694	1950
Alabama Great Southern.....	Dec. 6,332	221,124,004	19,711,643	240,835,647	36,601,372	49,387,962	4,822,848	59.0	10,340,735	5,177,627	1951
Cinn., New Orleans & Texas Pacific.....	Dec. 326	1,500,072	94,883	1,594,955	230,975	346,090	32,465	73.2	70,325,182	35,848,244	1950
Georgia Southern & Florida.....	Dec. 337	3,162,612	203,190	3,365,802	3,819,826	3,611,669	64,909	64.1	684,333	270,704	1951
New Orleans & Northeastern.....	Dec. 397	38,832,510	2,421,457	41,253,967	5,266,467	9,677,523	801,587	50.4	1,895,386	727,736	1950
Southern Pacific.....	Dec. 203	1,064,493	50,360	1,114,853	1,238,959	147,975	19,452	65.0	5,514,767	2,602,804	1951
Texas & New Orleans.....	Dec. 8,196	27,315,456	3,999,571	31,315,027	3,999,571	3,999,571	3,999,571	37.6	773,473	389,366	1950
Spokane International.....	Dec. 4,291	9,430,802	708,579	10,139,381	1,619,219	1,458,344	252,006	77.0	113,981,798	57,529,327	1951
Spokane, Portland & Seattle.....	Dec. 152	184,374	1,261	185,635	93,067	20,776,150	2,990,846	75.2	34,353,358	13,266,089	1950
Tennessee Central.....	Dec. 931	2,356,702	111,497	2,468,199	404,737	29,932	58,599	63.3	1,832,844	1,832,844	1951
Texas & Northern.....	Dec. 286	4,762,011	169,240	4,931,251	1,095,335	819,693	134,559	77.8	4,070,146	1,785,272	1950
Texas & Pacific.....	Dec. 8	85,489	.....	85,489	4,952	9,426	906	44.2	43,192	23,958	1951
Texas Mexican.....	Dec. 1,845	5,095,030	473,826	5,568,856	770,235	1,192,093	11,368	50.0	698,935	356,016	1950
Toledo, Peoria & Western.....	Dec. 162	2,967,710	.....	2,967,710	3,313,906	398,029	88,334	73.2	2,339,322	749,245	1951
Union Pacific.....	Dec. 239	513,931	3	513,934	42,723	49,832	51,525	64.3	336,696	127,615	1950
Utah.....	Dec. 9,867	35,557,763	3,963,742	39,521,505	4,372,232	2,643,466	857,961	61.2	4,128,228	1,610,535	1951
Virginian.....	Dec. 110	1,417,399	.....	1,417,399	183,061	572,634	9,316	91.7	179,011	100,687	1950
Wabash.....	Dec. 643	4,067,402	3,219	4,070,621	553,552	941,220	43,005	62.7	2,659,157	1,043,477	1951
Ann Arbor.....	Dec. 2,393	7,736,917	32,912	7,769,829	1,911,342	1,431,656	291,010	59.4	19,265,930	10,425,930	1950
Western Maryland.....	Dec. 294	677,586	.....	677,586	1,536,661	70,290	35,474	74.9	10,663,909	11,395,571	1951
Western Pacific.....	Dec. 836	3,845,029	12,479	3,857,508	452,553	789,238	78,395	66.0	3,073,879	1,330,820	1950
Wisconsin Central.....	Dec. 1,193	5,150,150	1,911,342	7,061,492	669,924	621,094	190,817	70.4	3,073,879	1,330,820	1951
.....	Dec. 1,046	2,141,735	3,011,426	5,153,161	7,612,978	4,232,421	69,232	64.5	35,966,780	19,288,941	1950
.....	Dec. 1,019	28,671,989	526,565	29,198,554	1,432,936	5,431,016	792,097	80.9	25,060,493	13,180,548	1951



### NOT ENOUGH DIESELS

A 41 per cent reduction in the production of diesel-electric locomotives for the United States railroads, during the third quarter of the current year, compared with the rate maintained in the first half of 1951, is definitely in prospect, if allocations of controlled materials announced tentatively for delivery to the builders during the second quarter are allowed to remain unchanged.

In the fall of 1950, a few months after the start of war in Korea, the newly established Defense Transport Authority stated its objective to be that of building up the railroads within a reasonable time to meet possible war needs. To that end, it urged that the railroads place orders for, and that the builders receive the wherewithal for, production of about 400 locomotive units a month. During the first six months of 1951, before the Controlled Materials Plan became effective, the builders actually produced an average of 330 units a month of the types above 100 tons and 600 hp.

With the switch to quarterly allocations, starting last July 1, progressively deeper gouges were taken out of locomotive builders' allowances for domestic railroads. For the third quarter, there were permitted 825 units (275 a month); for the fourth quarter, 745 (248 a month). In the first quarter of 1952 (for second quarter production) the allotment was further cut to contemplate only 676 units (225 a month), and, in the second quarter, only 582 units. The top of 194 units per month, on the average, which the last-named, tentative allocation will permit to come off the lines of the builders in the third quarter of the year will, to repeat, be 41 per cent below the rate of production of diesel units for domestic railroads which was maintained during the first half of last year.

Deliveries of new diesel locomotives to the railroads

in 1951 totalled 3,558 units—an all-time high. This extraordinary output was still insufficient to slacken the demand of the American railroads for this form of motive power.

At the end of the year, there were still orders on hand, unfilled, for 1,739 locomotives. In addition to these firm orders, the carriers had reserved places on builders' books, or committed themselves (subject to directors' approval) for several times more that number of diesel units.

#### *Some Neglected Truths*

One can only guess what mental or emotional processes led the allocators to decide to cut materials for locomotive building as much as 41 per cent. Maybe they believe the roads ought to quit scrapping steam locomotives; put enough work on their steam fleets to keep them serviceable; and give heavy repairs to those in storage. Some roads are, in fact, putting their modern steam locomotives in shape for the spate of war traffic which may lie ahead. But any policy which relies on existing steam power to fill the bill for new diesel units which the railroads, by their orders, indicate *they* want, overlooks the following facts:

- (1) The cost of repairing and rebuilding older steam locomotives is high in money, manpower and materials.
- (2) The locomotives thus preserved cannot match modern motive power in efficient use of track capacity, fuel or crews.
- (3) To keep older steam power in serviceable condition requires larger mechanical forces per unit than for modern locomotives.
- (4) There no longer exist on the railroads enough

representatives of the crafts which specialize in steam locomotive work to permit any substantial increase therein. According to Interstate Commerce Commission statement M-300, in October 1951, compared with the end of 1945, there were employed on the railroads 20 per cent fewer blacksmiths, 38 per cent fewer boiler-makers and 19 per cent fewer machinists.

### **Theory vs. Fact**

The truth of the matter is that almost every railroad in the country has, in recent years, shaped its maintenance and repair programs and its shop forces and facilities on a fairly definite rate of progressive dieselization. Certain obsolete steam power has been neglected deliberately and according to schedule—allowed to ripen for the scrap heap at a fixed time in the future. Shops and servicing forces and facilities have been dealt with accordingly. There is no magic now at hand by which these irrevocable steps can be retraced and reversed.

Then again, the planners may have dreamed up the notion that, at the rate of production achieved in the first half of 1951—amounting to 3,960 units on a yearly basis—the railroads would be completely dieselized in short order and that, somehow, it would be unfair to the country to let them enjoy this boon.

The future is by no means as simple as that. As of last August 31, diesels performed 53 per cent of freight gross ton-miles, 60 per cent of passenger train-miles, and 66.5 per cent of switching-locomotive hours. As of January 1, 1952, there were a total of 17,619 diesel units in service on the American railroads.

It is a serious error to assume that it would be necessary to increase diesel ownership only proportionately to this existing ownership to bring up performance of these services to 100 per cent (including work done by straight electrics). Even if *total* dieselization-electrification were the goal of every railroad (which it is not), there must be considered the likelihood that, the further dieselization proceeds on each property, the more difficult it will be to achieve utilization of the new power commensurate with that obtained heretofore. As the diesel fleet expands beyond the happy hunting grounds of "cream runs," there come into the picture the one-trick jobs, seasonal peaks, protection assignments and work train chores which doom power to low mileage.

One diesel locomotive builder has studied carefully the experience of a number of roads which have completely dieselized. It measured the work done by diesels against the number of units in service throughout the period of acquisition. Toward the final stages of the process, decreasing utilization demanded an increasing number of units proportionate to work done. On the basis of this study, the same builder estimates that, to handle a traffic level in 1955 which would approximate that of 1944 in freight movement and be only slightly higher than 1951 in passenger, the railroads would need at least 35,000 units for complete dieselization, excepting only existing electrified mileage. According to this ultraconservative guess, the railroads would have to about double the

number of diesel units now in service. Even at 1951's record production rate, this job would take five years.

Tentative allocation for third quarter production covers 700 units for the combined railroads, industrial, military and export locomotive production. Of this total, 602 units are classified as "railroad type" locomotives—i.e., 600-hp. 100-tons and upward. The diesel locomotive builders have asked that the allocation for 602 railroad-type units be raised to a minimum of 725 units for third quarter 1952 production. Such a rate, they say, will protect temporarily the highly specialized production facilities and manpower in their industry. However, to continue at this low level would be serious; therefore, they have requested that allocation for railroad-type units be increased to provide for production of 825 units in the fourth quarter of 1952, and for 900 units in the first quarter of 1953. This, they claim, would raise diesel locomotive production to a rate required by the railroads.

The increase sought by the builders is more modest than the 975 new units (of all types of power) per quarter which James K. Knudson, head of D.T.A., set as "minimum requirements" for the country's railroads in a speech on January 31. It is a fair and conservative request, in view of the expressed needs of the railroads themselves.

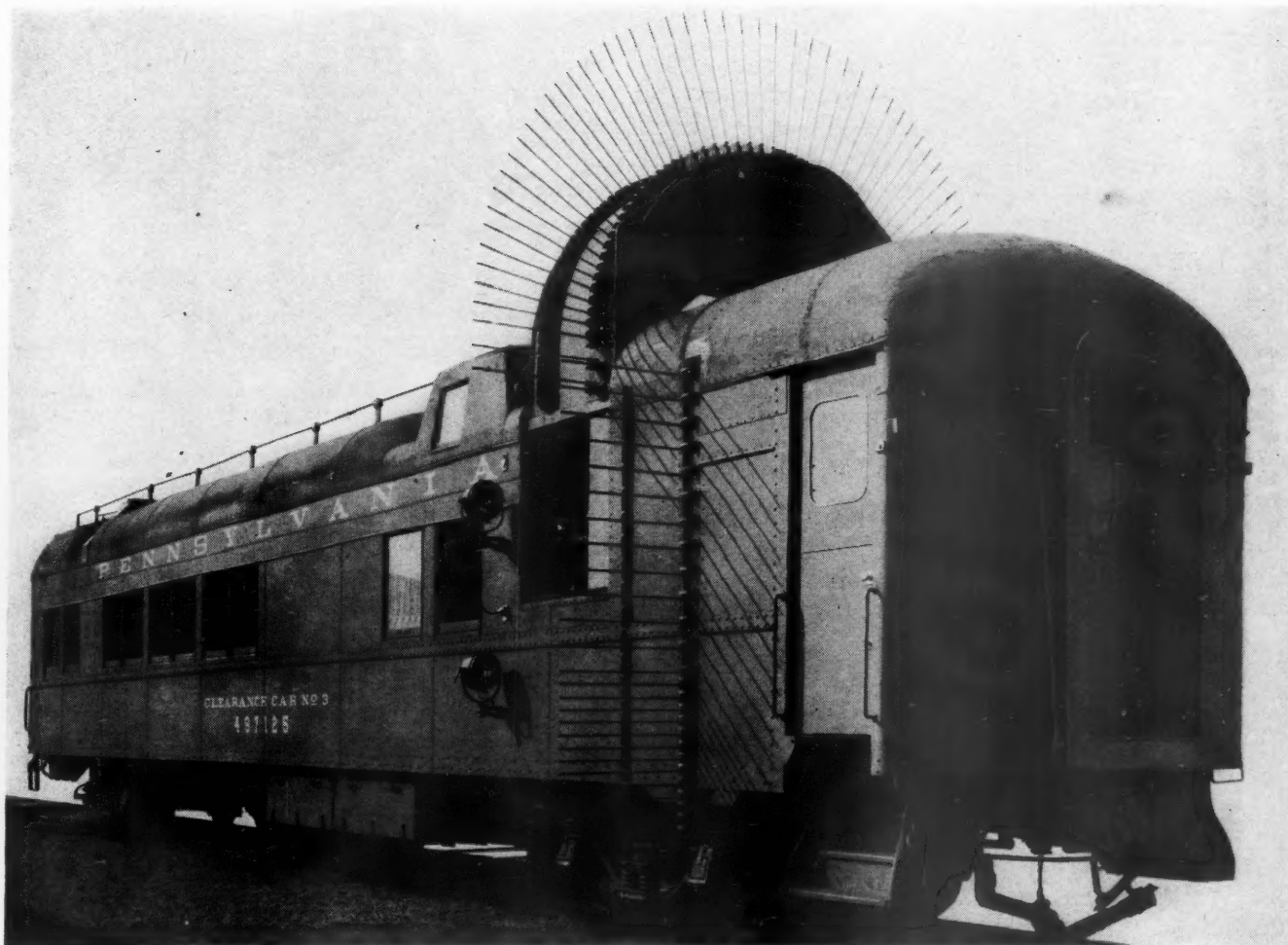
---

## **NOT ENOUGH POTTAGE FOR SUCH A BIG BIRTHRIGHT**

There is no denying that union members who pay dues and assessments in return for the "benefits"—genuine and imputed—derived from their union membership, have some grounds for complaint in the fact that non-union employees receive substantially the same "benefits" and pay nothing. The question is whether the compulsory "union shop" is not a remedy which is a great deal more objectionable than the disease. A headache is unpleasant, but cutting off the patient's head is a rather extreme expedient in the way of therapy.

The emergency board which handled this dispute pointed out that the labor organizations involved are "well established and responsible." The principal reason that statement can truthfully be made is that, up to now, if the managements of any of these unions should have started to behave irresponsibly, they might soon have found themselves without members, and hence without funds. The board proposes to remove this cause and safeguard of responsible behavior. It is no more intrinsically right to force people to pay dues to a union hierarchy they don't like than it is to make them pay to support a church or political party they don't like. Discommoding the "no bills" is a mighty small dab of pottage which union members are offered in exchange for the surrender of practically all their control over the labor bosses.





This is the front or "business" end of the Pennsylvania's new clearance car, which is equipped with four groups of templates: (1) horseshoe (top); (2) main (both sides); (3)

right-foot (below car floor and behind side template); and (4) left-foot (same as No. 3 on left side of car). In this view all feelers are extended.

## P. R. R.'s New Clearance Car

### *Another Step in Railroad Modernization . . .*

***Restrictive dimensions of any structure are determined in two or three minutes as measurements are taken and recorded while car is in motion***

The Pennsylvania for many years has operated a specially designed car for the purpose of accurately measuring the distance to objects above or adjacent to the tracks.

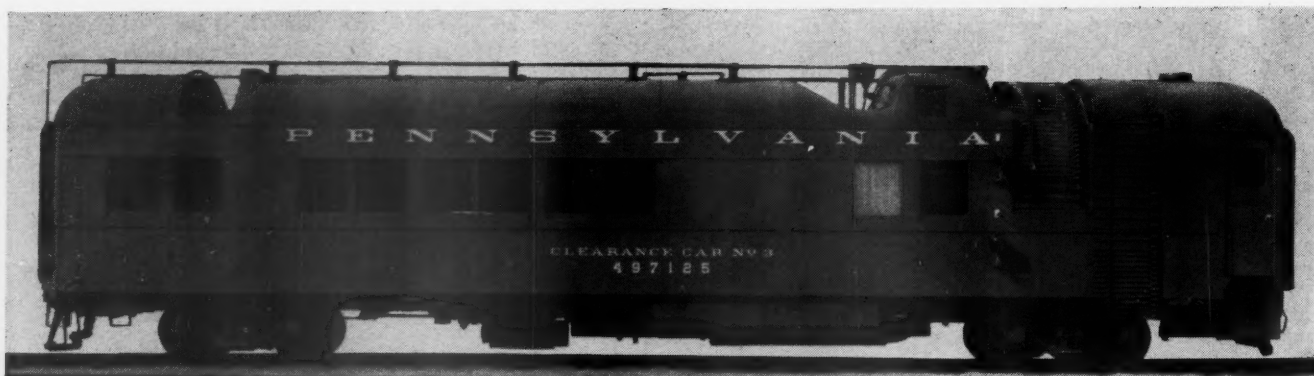
The demand for increased speeds to shorten travel

time, and the ever-increasing size of passenger and freight cars and commodities moved in open-top cars, coupled with larger motive power, have caused the railroads to provide greater clearances for movement of equipment. This trend of larger equipment and larger commodities in open-top cars has made the gathering of accurate clearance information of growing importance.

The Pennsylvania has spent many millions of dollars to obtain increased clearances on its lines. The most recent undertaking of this character was the Panhandle Division Tunnel project,\* between Pittsburgh, Pa., and Dennison, Ohio, costing over \$8 million.

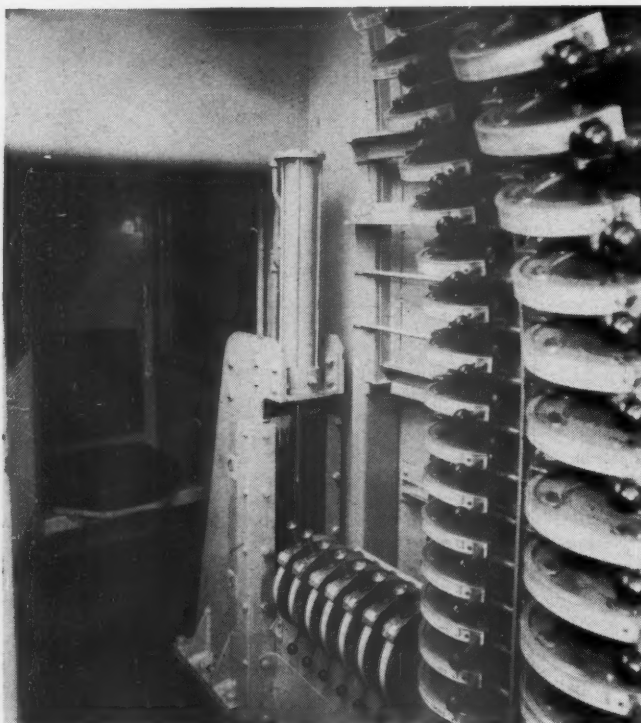
With the increased speeds and more frequent train schedules, together with the vast increase in traffic ex-

\**Railway Age* December 2, 1950, page 46.



With the feelers retracted, the car can be moved in a regular passenger train. Another template can be projected

from the recess in the roof at the rear for measuring clearances of overhead bridges more than 21 ft. above rail tops.



Here are a few of the indicator quadrants in the template compartment. The scales on the quadrants are calibrated so that readings will show the exact clearance measurements of the feelers. A magnifying glass with a hairline marking underneath permits quick and accurate readings to be made.



The car contains five compartments: a template or front compartment; a kitchen, washroom and toilet compartment; a dining and sleeping compartment; a lounge compartment; and a recording room at the rear. This view was taken from the second compartment looking toward the rear.

perienced during the last war, it was necessary to develop a means of measuring the clearance of structures along the railroad with greater speed and accuracy, without interference to the regular flow of traffic, than was possible with the previous clearance car which had become obsolete and was dismantled in 1950. To this end, the Pennsylvania's mechanical and engineering departments developed a new clearance car, which was built at the Altoona (Pa.) shops in 1950. The first test run was made over the Middle division on November 7, 1950, for measuring the Spruce Creek tunnel, which is 22 mi. east of Altoona.

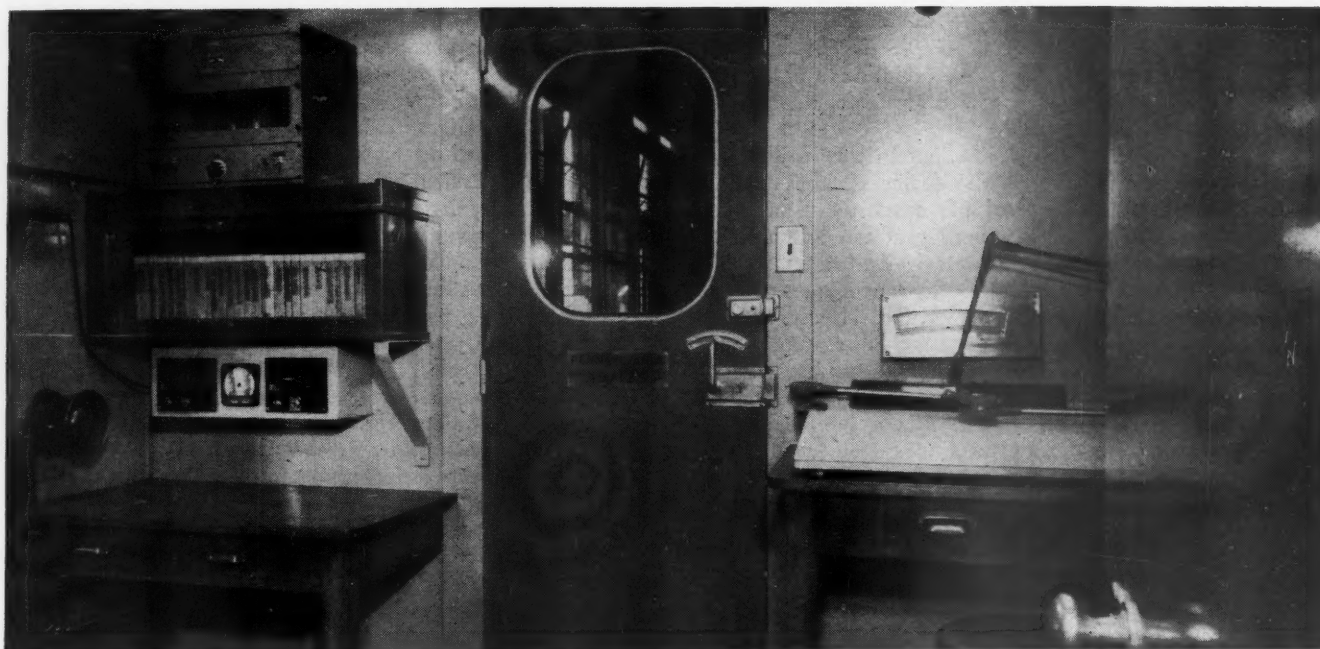
The car is of the P-68 passenger type, of the latest design, and is divided into five compartments. The head or front compartment is the template room where all the measuring instruments are located. This com-

partment has an observation dome for the inspection of overhead structures and tunnels.

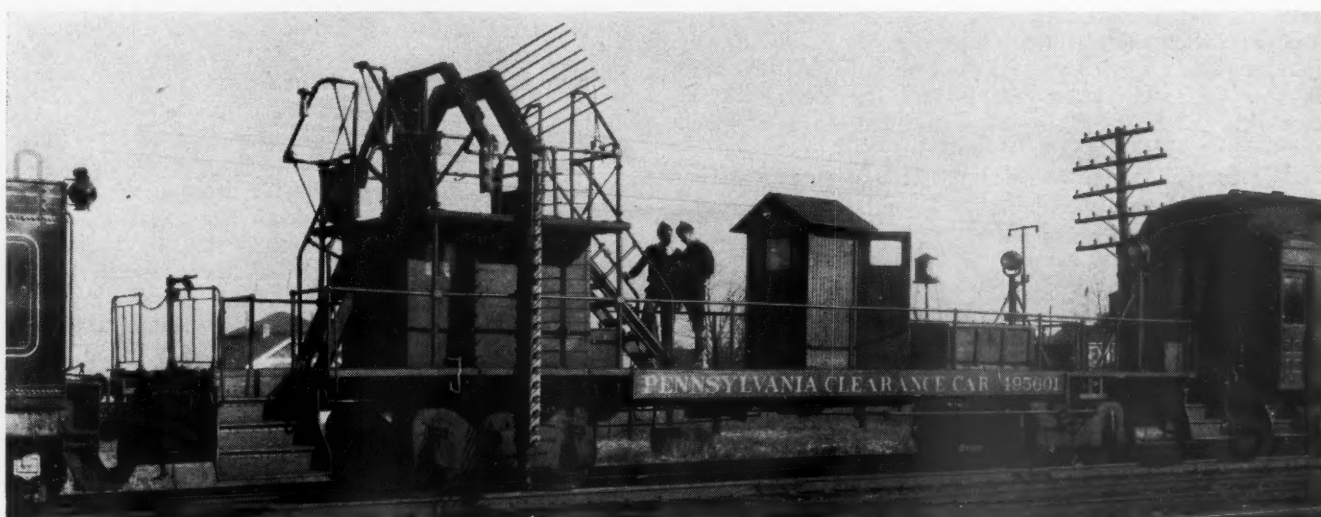
#### **Four Groups of Templates**

The measuring instruments in the template room, 126 in all, are in four groups, associated with (1) the oval template called the "horseshoe"; (2) the "main" template; (3) the "right-foot" template; and (4) the "left-foot" template. The horseshoe template, which is adjustable in height from 17 ft. 0 in. to 21 ft. 0 in. above the tops of the rails, has a straight portion on each side beginning at 8 ft. above the rails. This portion extends upward, perpendicular to the plane of the rails, to a point 9 ft. above the rails when the template is in the normal or down position, at which point it curves





The recording room contains a desk, a drafting table, filing cabinets, a speedometer, two electric tachometers, and a communicating telephone set.



In striking contrast to the new car (page 39) the Pennsylvania's former clearance car, which was dismantled in 1950 after 42 years of service.

over the top of the car on a 5-ft. radius. The main template remains in a fixed position on both sides of the car between the heights of 2 ft. and 11 ft. 6 in. above the rails.

The right- and left-foot templates, which extend downward from a height of 2 ft. 6 in. above the tops of the rails, are adjustable, and, when not in use, can be raised by a hydraulic lift through wells in the car floor to prevent them from striking objects along the track while not in use.

To any one entering the car for the first time through the template room, the measuring and recording instruments may seem complicated, but they are really quite simple. These instruments consist of three main parts: (1) feelers which are attached to outside gear boxes; (2) lengths of Teleflex cable which pass through special

brass tubing; and (3) inside indicator quadrants with gear boxes and magnifying glasses.

Each feeler, on the outside of the car, is 36 in. long and is made of 1/2-in. aluminum tubing having a hardened tip of tool steel which is flat at the end for more accurate measurements. The feeler is attached to a shaft extending from an outside gear box, and both the shaft and the feeler fittings have serrations for delicate adjustment on dead center. The feeler is secured to the shaft by two washers, a lock-nut and a clamp bolt. One washer is made of spring steel and is slightly cup shaped with protruding legs which bear against a fiber washer. Its purpose is to obtain proper friction so that the feeler will not swing back too freely or be too rigid when making contact with structures.

The flexible cable, which passes from the outside gear

box through the brass tubing to the gear box on the indicator quadrant, is of special design. It was developed during World War II for aviation and marine controls, and is still so used where accurate, dependable remote controls are required.

The indicator quadrant is attached to the inside gear box in the same manner as the feeler on the outside. To the outer circumference of the quadrant is attached a white scale with black numbers graduated from 0 to 36 in  $\frac{1}{4}$ -in. increments. The scale is calibrated so that its readings indicate exactly the clearance measurement for the position taken by the feeler. This is all incased, with an opening over which is attached a magnifying glass with a hairline marking on the under side to indicate the proper position for reading the scale. Also attached to the quadrant indicator is a handle for extending or retracting the feelers as required, and a stophold for locking the feelers in a closed position.

The car has an intercommunication system with two-way speakers and head-phone sets in the template and recording rooms for constant communication between the two during operation.

#### **Four Other Compartments**

The second compartment consists of a stainless-steel kitchen with electric refrigeration; a washroom equipped with three wash basins, mirrors and electric outlets; a shower room and a toilet room.

The third compartment comprises the dining and sleeping quarters for six men, with standard Pullman-type berths. This section also has lockers for each man to store his personal effects and additional storage space for linens and bedding.

The fourth compartment is the lounge room and is furnished with tables, chairs, and lockers for clothing. This room also serves as an overflow dining space.

The fifth and last compartment in the car is the recording room from which the operation of the car is directed. The recording room is equipped with a desk, a drafting table, and filing cabinets in which are kept the track charts, maps, and current clearance diagrams.

Some other special features of the car are an inductive train telephone for communicating directly with block offices; a conventional telephone for use when the car is parked at terminals; a speed indicator; and two electric tachometers (velocity instruments), one for designating distances in miles and the other in yards for location work such as in tunnels. The train phone has proved to be a great asset to the car. Its use enables the clearance car crew to coordinate its movement with the regular flow of traffic on the railroad and eliminates long inactive waits on side tracks.

#### **Operation of the Clearance Car**

Located directly over the center line of the rear truck, and reached through a hatch in the office ceiling, is a rear template. This is used for measuring overhead clearances of bridges and other structures which are more than 21 ft. from the tops of the rails and cannot be reached with the horseshoe template. Clearances of these structures are measured by telescoping gages that are extended to the underside of the bridge, and, as the car moves under the bridge, are pushed down to the minimum clearance of the structure. For direct readings these gages are graduated in feet and inches above the tops of the rails.

The clearance car is moved over the railroad in regular passenger-train service when traveling between

headquarters and locations where work is to be done. It is not a self-propelled unit. When taking measurements, it is moved in a train, consisting of a locomotive, clearance car and rider car, which is operated as a special passenger train.

In the recording room, at the beginning of a day's work, the first structure to be measured is located on a track chart by its mileage location, and on a clearance diagram by the type of structure, and the height for setting the template and feelers which are to be used. This is done as the car approaches the structure and this information is passed over the communicating system to the men in the template room. They set the template and put the feelers in operating position as the train slows down about two car lengths from the structure to about 5 m.p.h. The train continues at that speed until the measurements are recorded. While the train is still moving, the feelers and template are replaced to a closed position, after which the train picks up speed and continues to the next structure.

When the car is in measuring position, the feelers are extended outward, perpendicular to the template. As the car slowly moves by the structure to be measured, the feelers striking it are brushed back to the contour of the structure, thus indicating the distance from the template. This is recorded on a diagram to a scale of  $\frac{1}{2}$  in. to 1 ft. The diagrams of the individual structures are then compiled on a single sheet showing all objects between any two junction points. A separate diagram is prepared for each track in multiple-track territory.

#### **Information Available to All**

In all cases, three copies of the diagrams are made. Two are forwarded to the regional chief engineer maintenance-of-way, one being for his use and the other for the local division engineer, while the third copy is retained in the system office. In this way, the regions are kept informed of conditions in their respective territories and the local people have a definite record of any close clearance on their division with a view to improvement.

In order that other departments of the railroad, and also the public, may have clearance information in usable form, there is compiled and published from the clearance diagrams a tabulation of figures giving the clearance data for all through or local routes, and for sections of these routes between junction points. This compilation shows measurements for width and height of cars or loads that can be moved via normal routes, with the tabulations beginning 6 in. above the tops of the rails and showing permitted widths for each 3 in. of height up to 20 ft. All shipments with dimensions greater than those tabulated for a particular section of the railroad require special handling.

The clearance car normally is operated by a crew of four men under the direction of the clearance engineer. Each of the men has his specific duties. Two are stationed in the template room, and one in the recording room. The fourth man is the cook who also serves as a general utility man in the care and cleaning of the car and the equipment. The man in the recording room plots the measurements on the clearance diagram, as previously described, making notations of any unusual conditions or extremely close clearances, and he also keeps a record of the movements of the car and all structures measured.

The two men in the template room, one for each side of the car, operate the measuring instruments and observe the structures being measured, noting any unusual conditions.



One of the most important features of the car is the time-saving factor; the actual measuring and recording time having been reduced more than 75 per cent from that required with the now obsolete car. Also, the recording and plotting of each structure on the clearance diagram are actually done at the same time. In other words, upon completion of the recording of the measurements of a structure, which takes only two or three minutes, the clearance diagram is complete and the

clearance of a structure can be determined immediately. The diagram not only indicates the clearance distances upon completion of the measurements, but also enables the operators of the car to mark or point out that part of a structure which is causing clearance limitations. In this way the local division people can make any advisable changes to improve the clearance situation, which in many instances may involve nothing more than the shifting of a track.



One employee was killed in this accident, which resulted from a locomotive boiler explosion caused by low water.

## More Steam Locomotives Defective in 1951

***Fewer steam locomotive inspections made as diesel-electric rosters increased—Fatal accidents involving steam units more numerous***

The rapid change from steam to diesel-electric power is reflected in many ways in the annual report of the Bureau of Locomotive Inspection of the Interstate Commerce Commission recently released by Edward H. Davidson, director, for the fiscal year ended June 30, 1951. Reports were filed for 3,148 fewer steam locomotives and 3,608 more diesels than for the previous year. While the number of inspections made of the decreasing total of steam units dropped by 6,696 the percentage found defective increased from 10.1 to 12.9 and the number ordered out of service also increased—from 399 to 508. While the number of accidents in which

steam power was involved decreased slightly the number of persons killed doubled.

With respect to locomotives other than steam the increase over the previous year in the number of inspections made was 10,445. Of those inspected 8.3 per cent were found defective and 106 were ordered out of service. This type of power was responsible for 54 accidents, involving the death of 2 persons and the injury of 129.

One hundred sixty-seven accidents occurred in connection with steam locomotives, resulting in 14 deaths and 170 injuries. This represents a decrease of two

## SUMMARY OF REPORTS AND INSPECTIONS

### Steam Locomotives

	Year ended June 30—					
	1951	1950	1949	1948	1947	1946
Number for which reports were filed	26,595	29,743	33,866	37,073	39,578	41,851
Number inspected	62,113	66,809	85,353	93,917	94,034	101,869
Number found defective	7,995	6,740	7,035	9,417	10,248	11,337
Percentage inspected found defective	12.9	10.1	8.2	10.0	10.9	11.1
Number ordered out of service	508	399	436	654	708	690
Number of defects found	34,657	28,504	28,642	38,855	41,250	56,541

### Locomotive Units Other than Steam

	Year ended June 30—					
	1951	1950	1949	1948	1947	1946
Number of locomotive units for which reports were filed	19,320	15,719	12,692	9,803	7,805	6,616
Number inspected	52,948	42,503	30,684	20,798	13,115	10,908
Number found defective	4,375	2,748	1,238	853	633	499
Percentage inspected found defective	8.3	6.5	4.0	4.1	4.8	4.6
Number ordered out of service	106	42	20	21	19	17
Number of defects found	11,935	6,325	2,804	1,745	1,442	1,385

## ACCIDENTS AND CASUALTIES CAUSED BY THE FAILURE OF LOCOMOTIVE PARTS OR APPURTENANCES

### Steam Locomotives Including Boiler or Tender

	Year ended June 30—					
	1951	1950	1949	1948	1947	1946
Number of accidents	167	169	228	341	360	419
Percent increase or decrease from previous year	1.2	25.9	33.1	5.3	14.1	12.2
Number of persons killed	14	7	10	15	16	10
Percent increase or decrease from previous year	100	30.0	33.3	6.3	60.0	50.0
Number of persons injured	170	184	243	361	464	439
Percent increase or decrease from previous year	7.6	24.3	32.7	22.2	15.7	12.3

### Steam Locomotive Boiler

	Year ended June 30—							
	1951	1950	1949	1948	1947	1946	1915	1912
Number of accidents	51	59	81	104	116	156	424	856
Number of persons killed	3	4	9	14	12	10	13	91
Number of persons injured	59	70	94	108	124	165	467	1,005

### Locomotive Units Other than Steam

	Year ended June 30—					
	1951	1950	1949	1948	1947	1946
Number of accidents	54	51	49	41	40	38
Number of persons killed	2	3	..	..	2	..
Number of persons injured	129	50	67	50	41	56

## CASUALTIES CLASSIFIED BY OCCUPATION

### Steam Locomotive Accidents

	Year ended June 30—									
	1951		1950		1949		1948		1947	
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
Members of train crews:										
Engineers	2	51	2	64	3	75	3	109	6	126
Firemen	3	62	2	64	3	92	6	155	6	159
Brakemen	1	20	2	29	1	30	3	43	1	37
Conductors	6	..	4	..	7	..	5	..	10	..
Switchmen	1	8	..	5	..	6	..	10	..	9
Roundhouse and shop employees:										
Boilermakers	..	2	..	2	..	2	..	4	..	3
Machinists	1	2	..	1	..	4	1	2	1	..
Foremen	..	2	..	1	..	..	..	1	..	..
Inspectors	..	2	..	2	..	..	..	..	..	1
Watchmen	1	..	1	4	1	..	2	1	..	2
Boiler washers	..	..	..	..	..	..	..	..	..	..
Hostlers	1	4	..	1	1	8	..	8	..	6
Other roundhouse and shop employees	..	2	..	2	1	4	..	5	..	8
Other employees	..	3	..	4	..	6	..	12	2	21
Nonemployees	4	6	..	1	..	9	..	6	..	82
Total	14	170	7	184	10	243	15	361	16	464

### Locomotives Other than Steam

Members of train crews:										
Engineers	..	11	..	15	..	12	..	7	1	9
Firemen	1	30	..	21	..	14	..	24	..	21
Brakemen	..	4	..	3	..	6	..	1	..	5
Conductors	..	..	..	4	..	..	..	2	..	1
Switchmen	..	5	..	1	..	4	..	2	..	1
Maintenance employees	1	3	..	3	..	8	..	..	1	2
Other employees	..	13	1	2	..	13	..	2	..	2
Nonemployees	..	63	2	1	..	10	..	12	..	..
Total	2	129	3	50	..	67	..	50	2	41

accidents, an increase of seven in the number of persons killed, and a decrease of 14 in the number of persons injured compared with the preceding year.

During the year, 13 per cent of the steam locomotives inspected were found with defects or errors in inspection that should have been corrected before the locomotives were put into use; this is an increase of 3 per cent from the results of the preceding year. Five hundred and eight locomotives were ordered withheld from service by inspectors because of the presence of defects that rendered the locomotives immediately unsafe; this is an increase of 109 locomotives compared with the preceding year.

### Fewer Boiler Explosions

Six boiler explosions occurred in the fiscal year; all were caused by overheating of the crown sheets due to low water. Three persons were killed in these accidents and 13 were injured. There was a decrease of three in the number of boiler explosions and a decrease of one each in the number of persons killed and injured compared with the preceding year.

Four of the explosions occurred on locomotives in freight-train service, one on a locomotive in switching service, and one on a locomotive in charge of a watchman. One of the locomotives used in freight service was equipped with a low-water alarm which was badly damaged by the explosion that caused the death of the engineman and fireman. Evidence could not be developed to show whether or not the alarm functioned prior to the accident. The top water-glass connection was defective on another locomotive and caused a false high indication of water level in the boiler which deceived the engine crew; this condition resulted in an overheated crown sheet and subsequent explosion. Absence of a safe water level was known to employees on two of the locomotives prior to the explosions.

Forty-five boiler appurtenance accidents other than explosions resulted in injuries to 46 persons. This is a decrease of five accidents and a decrease of 10 injuries compared with the preceding year.

### Time Extension for Flue Removal

Eight hundred eighteen applications were filed for extension of time for removal of flues, as provided in Rule 10. The bureau's investigations disclosed that in 57 of these cases the condition of the locomotives or other circumstances were such that extensions could not properly be granted. Nine were in such condition that the full extensions requested could not be authorized, but extensions for shorter periods of time were allowed. Thirty extensions were granted after defects disclosed by investigation were required to be repaired. Twenty-one applications were canceled for various reasons. Seven hundred and one applications were granted for the full period requested.

### Locomotives Other Than Steam

Fifty-four accidents, resulting in two deaths and injuries to 129 persons, occurred in connection with locomotive units propelled by power other than steam. This represents an increase of three in the number of accidents, a decrease of one in number of persons killed and an increase of 79 in the number of injured compared with the preceding year.

During the year, 8.3 per cent of the locomotive units inspected were found with defects or errors in inspection.





Damage to locomotive boiler caused by crown sheet failure resulting from low water. The enginemen were killed in this accident.

tion that should have been corrected before the units were put into use; this represents an increase of 1.8 per cent compared with the results obtained in the preceding year. One hundred six locomotive units were ordered withheld from service by inspectors because of the presence of defects that rendered the units immediately unsafe; this represents an increase of 64 units compared with the preceding year.

Under Rule 54 of the Rules and Instructions for Inspection and Testing of Steam Locomotives, 117 specification cards and 3,072 alteration reports were filed, checked, and analyzed. These reports are necessary in order to determine whether or not the boilers represented were so constructed or repaired as to render safe and proper service and whether the stresses were within the allowed limits. Corrective measures were taken with respect to numerous discrepancies found.

Under Rules 328 and 329 of the Rules and Instructions for Inspection and Testing of Locomotives Other Than Steam, 3,828 specifications and 716 alteration reports were filed for locomotive units and 692 specifications and 271 alteration reports were filed for boilers mounted on locomotive units other than steam. These were checked and analyzed and corrective measures taken with respect to discrepancies found.

No formal appeal by any carrier was taken from the decisions of any inspector during the year.

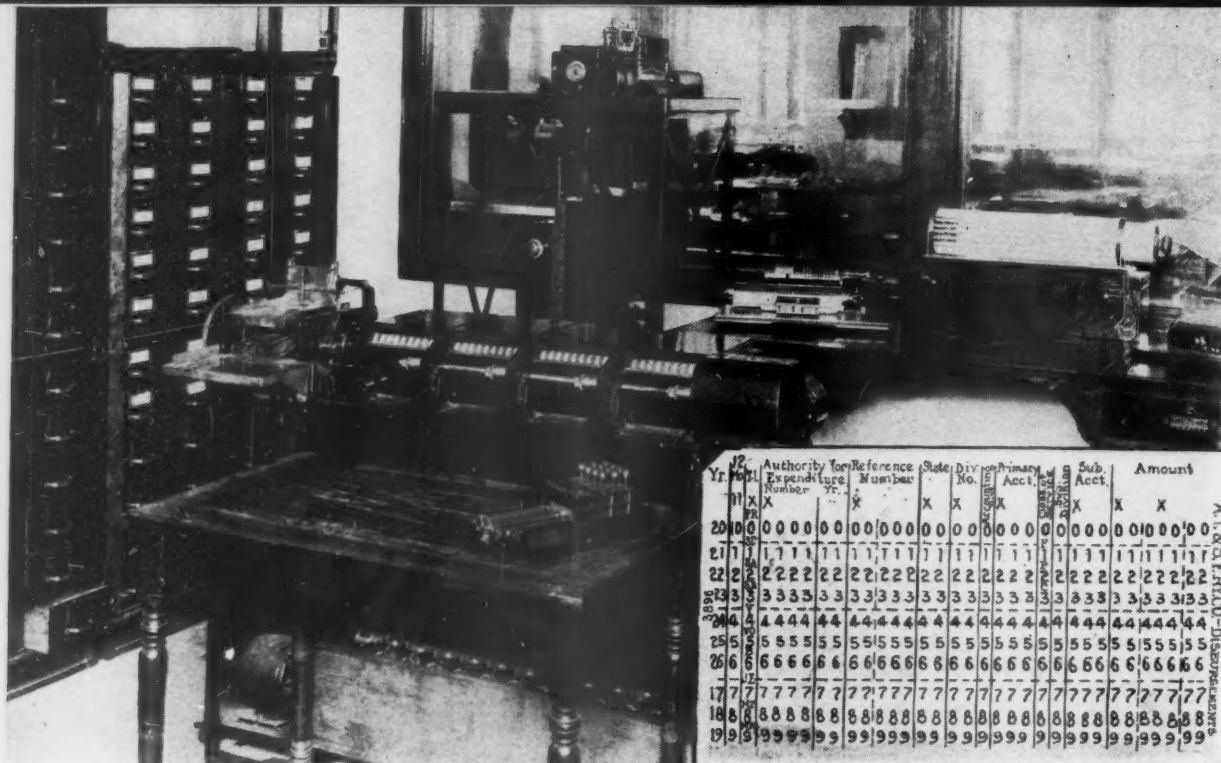
## NEEDED—A NEW LOOK!

"By 1951, government regulation over parts of the transportation system was so far-reaching that management's voice was very small; and at the same time vast segments of transportation were free or virtually free to take the cream of the crop without regulation. Policies, confused and contradictory, were based on conditions far in the past. . . .

"Critical times in the American economy are ahead, whether or not there is war. In the next decade the fate of transportation as private enterprise is likely to be determined. Although there is no organized or controlling opinion in favor of government ownership, common carriers face increasing danger of nationalization because of economic and political pressures — and because of the failure of national policy on promotion and regulation.

"If all forms of transportation are to survive and perform their appropriate service at lowest possible cost, competitive relationships must be corrected and the obstacles of excess regulation removed. Another cycle of bankruptcies would leave scars not only on those directly affected, but would mean further government interference. Hence we must create strength to survive under the most adverse conditions. . . .

"Congress must take a new look at transportation; transport agencies themselves must learn to live together and solve their problems together; and all of us, whatever our own principal interest, must share in the responsibilities of maintaining freedom in America."—*Transportation Association of America.*



Early punch card equipment visible at left shows sorting and tabulating machine outfit, in addition to other equipment. Card at bottom has considerably fewer columns than does modern card.

Yr.	Pl.	Authority	For	Reference	State	Div.	Primary	Sub.	Amount
11	X	Expenditure	Number	Year	No.	Acct.	Acct.	Acct.	
20	0	0	0	0	0	0	0	0	0
21	1	1	1	1	1	1	1	1	1
22	2	2	2	2	2	2	2	2	2
23	3	3	3	3	3	3	3	3	3
24	4	4	4	4	4	4	4	4	4
25	5	5	5	5	5	5	5	5	5
26	6	6	6	6	6	6	6	6	6
27	7	7	7	7	7	7	7	7	7
28	8	8	8	8	8	8	8	8	8
29	9	9	9	9	9	9	9	9	9

Prior to 1930 the St. Louis-San Francisco prepared abstracts (below) on interline carload freight using these people and machines.

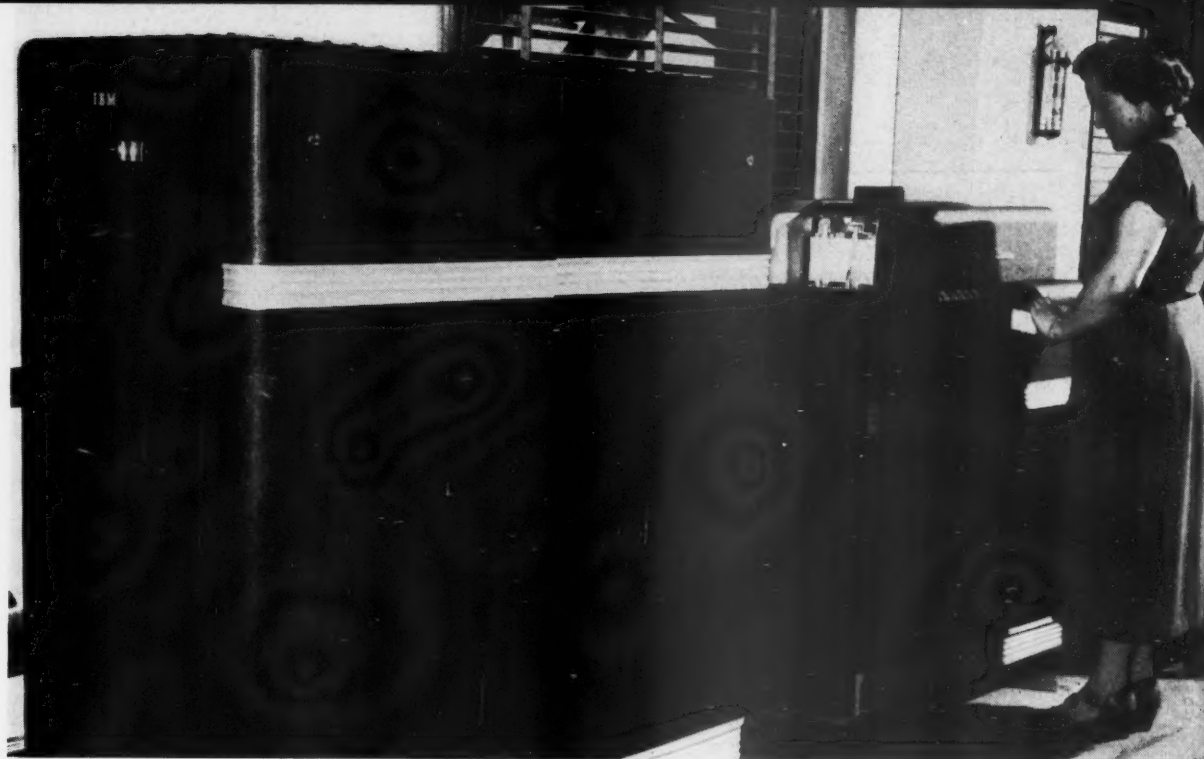


## Barriers Between Departments Must Go To Obtain Maximum Paperwork Economies

*Management's interest in paperwork should be as great as in diesels or retarders—Office methods and procedures departments with direct access to management are the big need, says E. H. Bunnell*



Today's punch card equipment at right not only looks different from that of 30-40 years ago but is considerably more efficient.



About 1930 this equipment accounting-bookkeeping (below) took over the preparation of the abstracts. Operator was aided by book which carried divisions already figured.



**Reporter**—Mr. Bunnell, would you say that there has been considerable progress in the efficiency shown by the railroads, over the past 50-odd years, in performing paper work? Or does the mere fact that they are using a lot of machines to do that work tend to obscure the fact that they still have a long way to go?

**Mr. Bunnell**—We certainly have come a long way since 1900. I think probably the outstanding thing that has happened, from management's point of view, in railroad accounting is the fact that we now are able to get reasonably accurate performance figures to management within a few days after the close of a given month. But

there's still plenty of room for improvement. However, when I started in this business it took us a month to get the figures out.

**Reporter**—Well, after you gave management the figures, what then?

**Mr. Bunnell**—In the early days of the twentieth century figures didn't mean much to most presidents. And how could such figures be worth anything? They were so stale when the president got them that any "situation" revealed by the figures probably had changed completely by the time the figures were ready. In those days, too, railroad officers "flew by the seats of their pants," so to

*[With the retirement of E. H. Bunnell, vice-president—finance, accounting, taxation and valuation of the Association of American Railroads, whose career in railroad-ing spans the 52 years of the present century, it is appropriate to review the progress made in that era in the performance of railroad accounting and related paper work. Mr. Bunnell's career included service as auditor of disbursements of the Atchison, Topeka & Santa Fe, and as general auditor, comptroller and chief accounting officer of the St. Louis-San Francisco, prior to his going to the A.A.R. in 1934. During the period of Mr. Bunnell's business life, modern railroad accounting came into being. The highlights of that development have been recounted by Mr. Bunnell in an interview with a Railway Age editor, which appears on these pages.]*

speaking. They paid little attention to us in the accounting departments or to our figures. And, to a certain extent that's true even today.

**Reporter**—Mr. Bunnell, what was the situation back around 1900 in the paper work field, and what were, in your opinion, some of the milestones in the progress of the railroads toward better methods of doing their paper work?

**Mr. Bunnell**—Errors in reporting all sorts of figures, duplication of effort, highly repetitive work for most people, and bookkeeping rather than accounting—these terms adequately describe the situation around 1900 when I first went to work on the Santa Fe.

The coming of the Interstate Commerce Commission's uniform system of accounts in 1907 created for the industry common accounting objectives, so to speak. Thenceforth the railroads could seek out together the best means of accomplishing those objectives. Then, by 1910, calculating and bookkeeping machines had come along to aid us in our work, and there were in operation also a few of the early and primitive punch card installations. The use of machines in doing paper work led to the centralized machine bureau where regularly assigned operators could perform large volumes of work.

In 1920, after World War I, when the government turned the railroads back to their owners, railroad accounting methods and procedures were in a chaotic condition and this called for a careful review of those methods and procedures in the interest of economy. More centralization occurred as a result of this re-examination of our work and the assembly line technique for doing mass production paper work "took hold" and has continued up to the present. Then in 1934, the A.A.R. was born, and with it the accounting division. The division has helped the railroads by acting as a clearing house for information of many types, and as a contact with the I.C.C., the Bureau of Internal Revenue, etc. That brings us up to the moment pretty much, I think.

**Reporter**—What was there about the machine which was—and still is—so attractive to accounting officers?

**Mr. Bunnell**—Well, the machine does make possible doing a larger amount of work in any given time with the same or a smaller number of men. But, aside from that economy, I think the machine would be worth the money we invest in it if it did not increase production but only eliminated a large percentage of errors, which it does. You know, in doing highly repetitive work, a person gets tired or bored very easily, simply because the brain is not being used to its capacity, and errors result. However, economy was and is important in making machine accounting attractive.

**Reporter**—Would you say that there have been other

factors which have helped the railroads considerably in improving their accounting and statistical work?

**Mr. Bunnell**—Shortly after the turn of the century, the ideas of controls and job standards were introduced. On the Santa Fe, from 1903-1906, Harrington Emerson, an efficiency engineer, worked at the Topeka shops in an effort to improve productivity there. Emerson was a firm believer in time studies and in records that were up to date, for without them you didn't know where you were, he thought, and therefore couldn't know where you were heading. Fact finding was the all-important first consideration with Emerson. Once you had the facts you could set up controls and job standards which would help increase production and eliminate waste. Those principles, applied to doing paper work, have helped make possible the advances the railroads have made. It was while working with Emerson, incidentally, that I had my first experience with punch cards.

**Reporter**—In your opinion, what are the biggest obstacles today to obtaining increased efficiency in railroad accounting? Are there still fields where the idea of the job standard, for example, has not caught on?

**Mr. Bunnell**—No, the ideas of controls and job standards are generally accepted and applied in accounting and statistical work. They could be applied more widely than they are now, perhaps, in other work in the railroad industry. Our main problem now is to obtain further applications of the devices now available which will promote economical clerical work. I've said, so many times that I suspect many people are tired of hearing it, that today there is available a machine which can perform almost any railroad paper work much better than can the unaided man. And generally, the return on the investment in such equipment is very high.

**Reporter**—If what you say is true, why haven't these devices been more widely adopted?

**Mr. Bunnell**—The railroads' problems are two in kind; political—by which I mean the questions of subsidy and equal regulation, as well as wage negotiations and applications for increased freight rates, etc.—and economic. When I say "economic" I mean those problems whose solutions can be found primarily through fact finding and making operational and other economies. More concern with political—rather than economic—woes has led us to the point where we say that until we can cure the political ills why worry about the economic ones. I realize, of course, that with the money available only

#### RAILROAD PAPER WORK RESEARCH PROGRAM RECEIVING THE ACTIVE ATTENTION OF THE FINANCE, ACCOUNTING, TAXATION AND VALUATION DEPARTMENT OF THE ASSOCIATION OF AMERICAN RAILROADS AS OF JANUARY 1, 1952

1. Reporting car movements, car records, car tracing, car location and car accounting and statistics  
Fully Mechanized and Integrated with Car Accounting and Statistics
2. Mechanization and improvement in railroad accounting and statistical "paperwork" with the aid of office mechanical devices now available
3. Development of book form of ticket for interroad passenger traffic and simplification of passenger tariffs and passenger division circulars, consolidation and simplification of freight division publications and railroad freight tariff research activities by a railroad tariff research group
4. Photographic processes now available for making copies of waybills, correction accounts, statements of differences, etc., and for processing and filing current and stored records



so many of these economic woes can be cured in any given period.

**Reporter**—Why is there this concern with what you call the political problems, almost to the exclusion of the economic ones?

**Mr. Bunnell**—There's do doubt that the political problems are very pressing. Consequently, top management has tended to concentrate on them, since they are primarily top management problems, at least insofar as mapping out the strategy for attacking them is concerned. Perhaps, therefore, the difficulties that I call economic ones have been left to the department heads altogether too much, and I'd say that paper work has been somewhat neglected by top management, as well as by some department heads.

**Reporter**—Let's follow through on the point you just made. Can you point to any particular part of railroad paper work where, in your opinion, lack of management attention has allowed some of the "economic" problems to go unsolved?

**Mr. Bunnell**—Yes. Many roads have gone to punch card installations for car accounting, but only one road, the New Haven, has thus far gone "all out" in the use of punch cards, combined with Teletype and tape-to-card and card-to-tape machines, to do a full job of speeding up the handling of trains through yards and interchange points, tracing records, passing reports, etc. Extension of this system to provide for exchange of punch cards between roads would also speed up and make more economical car accounting and short routing of empties and reduce the total number of cards cut manually.

**Reporter**—Why do you suppose that, as you say, most roads are using the punch card only for car accounting rather than doing the whole job?

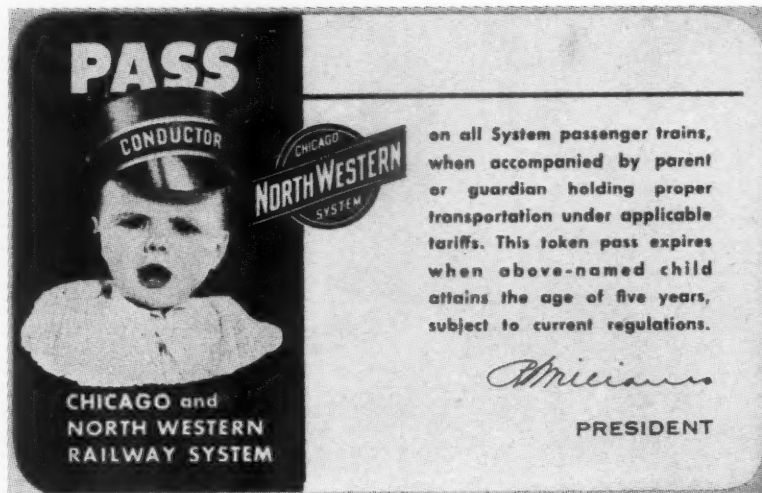
**Mr. Bunnell**—There are, perhaps, two factors. The first, and I think most important one, is that too many of these installations are made only with the idea of simplifying the work of one department. Since such an installation ties in the operating, car accounting, communications, accounting and traffic departments, you can see that if one or more of these departments is left out of consideration there's little likelihood that the job will be done properly or completely. The second factor is the one of the expense of such an installation. However, no one need cover his whole line at one fell swoop. The job can be done a bit at a time, as funds are available or as each aspect of the installation is running satisfactorily. That's what the New Haven did.

**Reporter**—What would you say is the best way to get around this tackling of jobs in a piecemeal fashion?

**Mr. Bunnell**—I think that those roads are fortunate which have methods and procedures departments or personnel which direct access to the ears of the top management. That way, where the persons primarily responsible for doing the job will, so to speak, cut across departmental lines, the railroad has the best assurance that a complete job will be done.

**Reporter**—You have mentioned the use of punch cards in car accounting and related work as one of the greatest possible money savers for the railroads. Is there anything else which in your opinion holds out promise of further progress in the industry?

**Mr. Bunnell**—Wait a minute—I'm not finished with this tape-to-card business and its ramifications. I'd like to say that the card punched for car record purposes probably also can be used for revenue accounting pur-



THIS COMPLIMENTARY "PASS," properly filled out, is being sent by Chicago & North Western representatives, with an explanatory letter, to youngsters whose births are listed in local on-line newspapers.

poses on local carload traffic. Also, those cards can be used to help the traffic departments find out who is—and who is not—favoring us with his business. Sometimes, I'm afraid, traffic is lost to us for months before we even know it's gone.

But to answer your question. Working at present is a joint committee of accounting and traffic officers, whose job is to determine ways and means to simplify passenger tariffs and division circulars. The work of this committee promises ticket agents a simpler price list, while management may expect lower bills for printing tariffs and division circulars. Couple the potential savings from these sources with the success of the simplified book ticket and you have means of reducing to some extent the passenger deficit. Similar action in consolidating and simplifying freight division publications is being taken by a joint committee of freight traffic and accounting officers and a special tariff research group.

**Reporter**—It's obvious that you think there are important economies ahead for the railroads in the performance of their accounting and other clerical work. What conditions would you say are necessary to bring about those desirable results?

**Mr. Bunnell**—First, in addition to more methods and procedures men to find facts, the very top management must take as great an interest in paper work as it has in the diesel, retarder-equipped hump yards, improved communications, etc.

We whose primary responsibility is seeing that paper work gets done and that the proper statistics are in the hands of management at the proper time, and now I'm speaking mainly about the accounting officers, must learn to talk with our managements in their terms, not in ours. Most of them did not come from accounting departments, remember. I'd include among those whose language we must learn to talk the heads of other departments, as well as presidents. When we do talk with them in terms understandable to them, we'll make more of the progress we've been seeking, and incidentally add luster to our own stars.

In the long run what I'm proposing here is a closer integration of departments, or a breaking down of the interdepartmental barriers which always have hampered railroad progress over the years, particularly in the handling of railroad paper work relating to accounting, statistics and fact finding.



All photographs by U.S. Army

# Railroads in Korea

## "Rail-Mindedness" Pays Off

### An on-the-scene report

[The following letter was written to a personal friend by Master Sergeant John G. Rasky, a furloughed Santa Fe employee now with a railway operating battalion in Korea.]

PUSAN, KOREA

HELLO DAN:

Here's another little story on transportation in Korea—

Both strategically and tactically the enemy has the transportation advantage in Korea. To offset it, the United Nations have to display more and more diversified equipment, requiring greater numbers of men and more material.

The strategic advantage of the enemy consists in the nearness of his immediate supply base, Manchuria, and in the eight railroads and five motor highways extending to Korea. All of them connect with the great north-south trunk line of the old South Manchurian Railway, by means of which imperial Japan drained the riches of Manchuria to the sea. Outside industrial Siberia, no other Asian railroad can carry such heavy traffic—nearly 26 million tons of freight in prewar years.

The principal shortcoming of the Trans-Siberian supply line in the transportation strategy of the Korean war was the break between Soviet broad gage and Chinese and Korean standard gage. This has been largely overcome by the recent extension of a broad-gage five-foot track to Mukden in South Manchuria. Previously the construction in Changchun, farther north, of more than twelve parallel broad-gage and standard-gage terminal tracks equipped with overhead conveyors and bridge cranes, together with the extensive use of freight con-

The writer of this letter is one of the capable railroaders in the U. S. Transportation Corps which has been operating the South Korean railroads under the United Nations command. In appraising his views on the comparative deficiencies of the railroads in U. N.-controlled Korea, it is important to remember that the Koreans were never allowed to learn railroad management while their country was under the control of the Japanese. Following liberation by the Americans it is natural, therefore, that the South Koreans should encounter some difficulties in establishing a smooth-working, trained railroad organization. In North Korea, the old order more or less continued with the Russians taking the place of the Japanese.

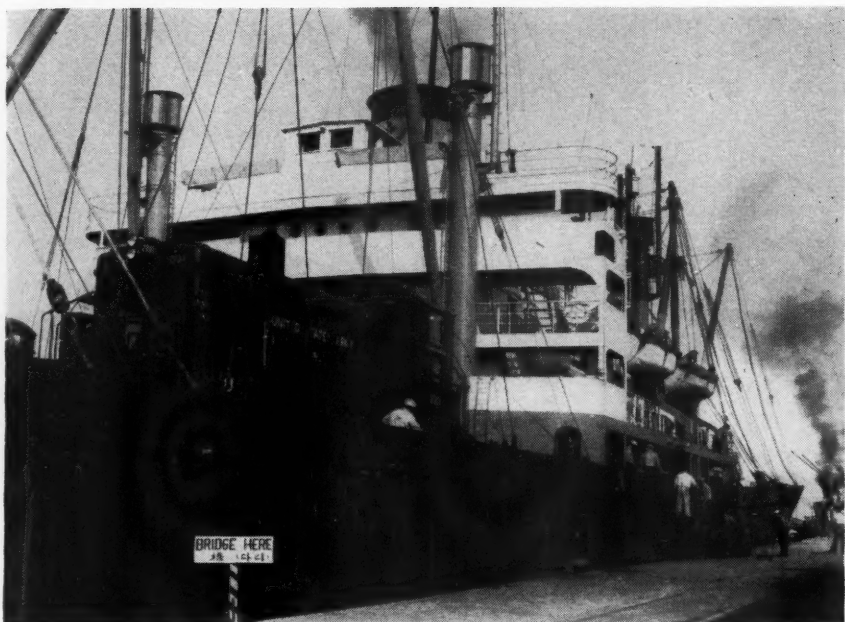
State-side observers also point out that during the occupation period between liberation and the break-out of the present conflict, the United States wasn't preparing for war. The prime American interest was to get out of Korea—leaving it for the Koreans—not in building it up in anticipation of conflict.

The Japanese left the Korean railroads with their roadbed and physical properties in good shape, but the rolling stock—as the writer points out—was bad, and has been a problem ever since.

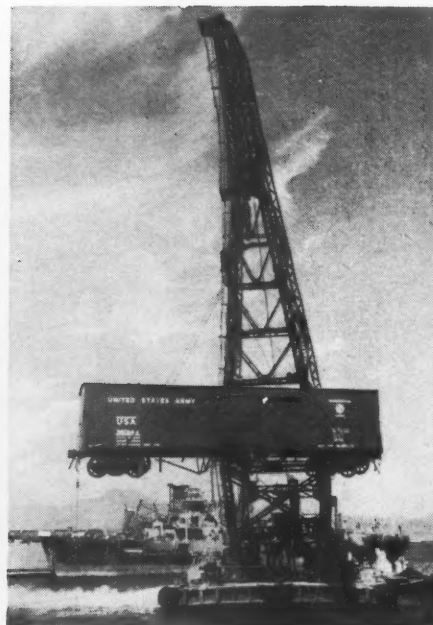
tainers, had gone a long way toward patching up the gage difference.

The United Nations, who have to move their forces and supplies more than 6,000 miles by sea, unload

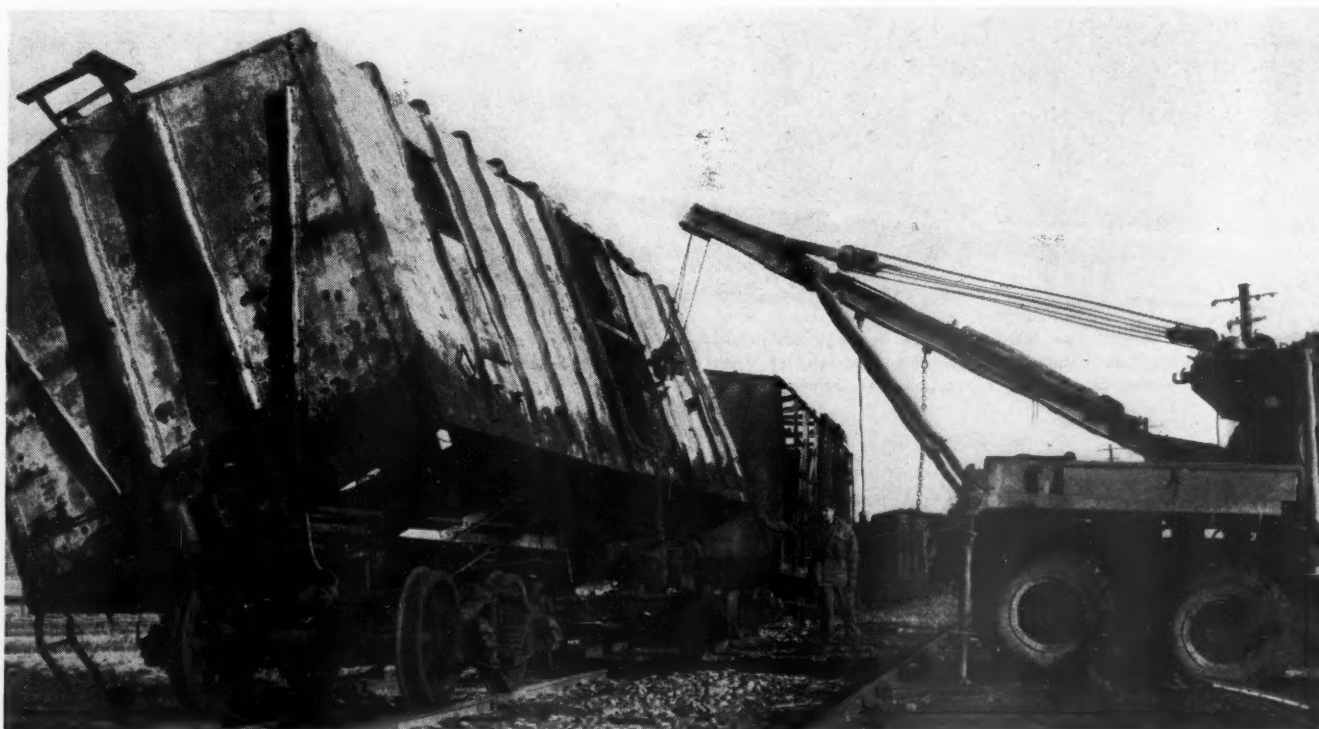




800-hp. Electro-Motive diesel road-switchers and Japanese-built freight cars arrive in Pusan harbor. Providing rolling stock for the South Korean railroads presented many problems in the early stages of the conflict because the Japanese



railroads—the nearest source of supply—are narrow-gage. Consequently the U. S. Transportation Corps had to resort to many makeshift measures until new equipment could be manufactured and imported.



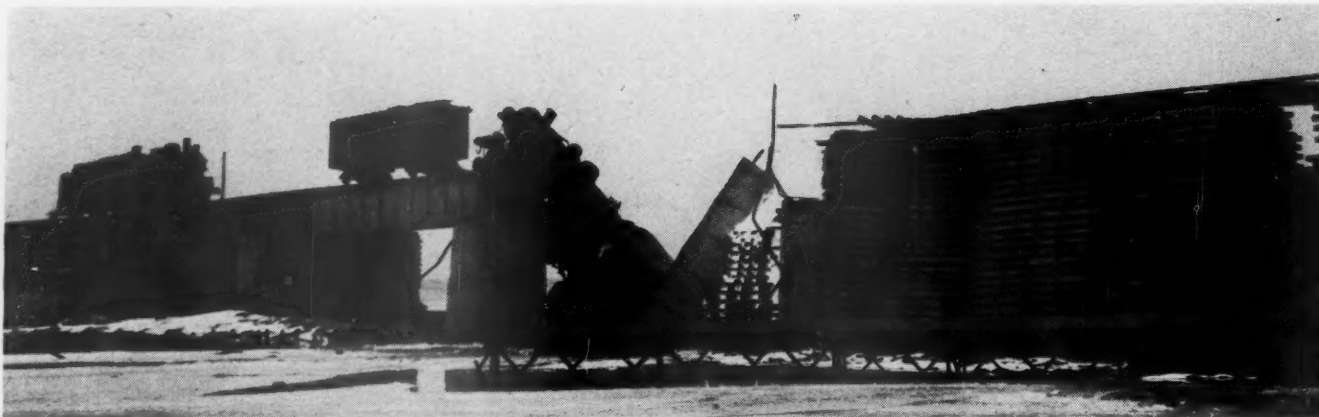
A six-ton wrecking truck of the type used to rerail damaged equipment and to clear obstructed tracks.

their ships, then reload everything on rail and motor vehicles, are in a much less favorable position.

Tactically, too, the enemy has the advantage. Korea is essentially a railroad country (it has more track mileage per square mile than any other country of continental Asia)—but the main rail network is in the north with its more favorable topography. North Korea's railroads were in much better condition than those of the south at the time fighting began.

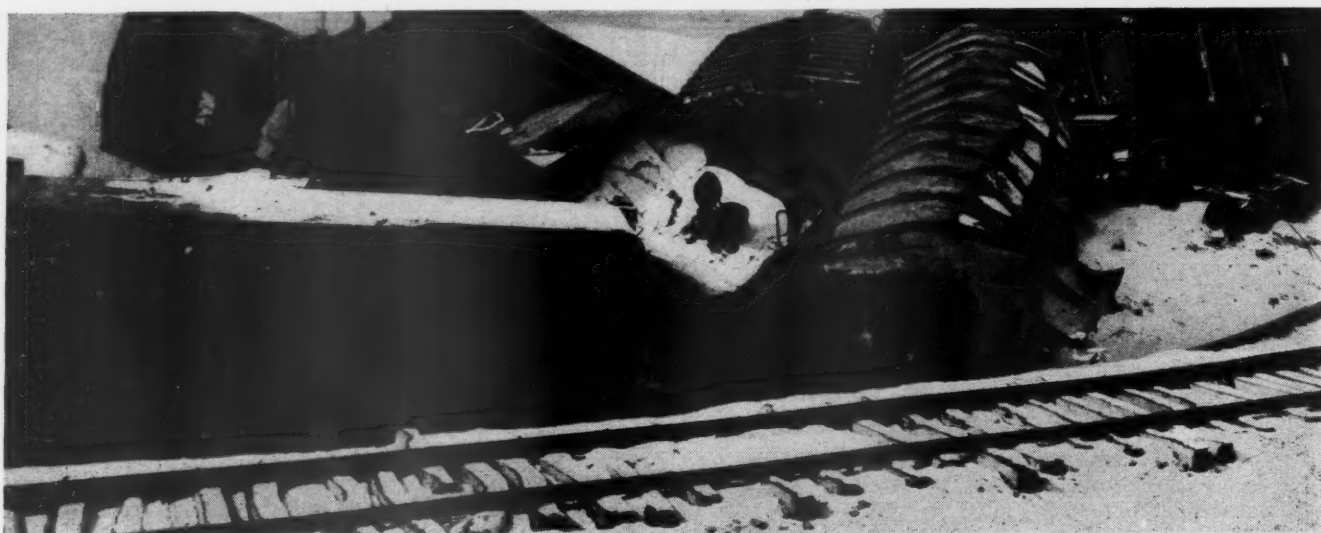
In 1945 when the rail-minded Soviets moved in, they found 308 of the country's 490 heavy locomotives in the industrial north. Being short of motor vehicles, their first concern was to restore railway traffic.

The United States, occupying the predominantly rural areas south of the 38th parallel, did not have the same problem. There, traffic was lighter and distances shorter. Because of the necessity of transshipping everything that entered or left Korea by sea, Americans, with oil in



Destruction and reconstruction are illustrated alike by this view of a bridge across the Songchon river at Hamhung, taken during the early stages of the Korean conflict. The bridge was originally destroyed by the retreating Communists,

recaptured and rebuilt by U. N. forces, and was in the process of being destroyed for the second time when this picture was made. Useless locomotives and cars are pushed over dynamited gaps, and then remaining cribbing is set afire.



Although aerial attack can inflict serious damage on equipment and lading, as illustrated by this Communist train knocked out by the U. N. air force, on the banks of the

Han river, damaged equipment can be quickly pushed aside and the line reopened. Notice the bent short ties used to restore the track.

abundance, preferred truck transportation with its convenient access to the piers. However, most of the highways were unsuited for heavy military traffic.

When North Korean forces broke over the dividing parallel, South Korea's railroads still were not working at full capacity. Yet Uncle Sam, the lavish provider, had sent more traction material and rolling stock to South Korea than there had been in all of Korea before the war.

Only poor management by the South Koreans—because they had no background in railroading—and a lack of real interest on the part of the Americans can explain the poor showing.

While South Korea's railroads floundered, inefficient and poorly operated under a wholly autonomous management, the North Korean government, in all its branches tightly controlled by Moscow, announced in a preliminary plan-report published early last year that the performance of its railroads was several per cent above prewar. In view of the steady flow of strategically important traffic to Manchuria and the U.S.S.R. and of large quantities of Soviet military and industrial equipment in North Korea, it seems probable that, in this respect, the North Koreans exaggerated little, if at all.

Ironically, it was American engineers and contractors

who planned and started Korea's railroads. Japan completed them with war and expansion on the mainland of Asia in mind.

During the Russo-Japanese war, the Japanese army completed the link between Pusan and Seoul, and pushed the northern section of the Korean trunk line from Seoul to the Manchurian border. Between wars the Japanese strengthened and extended their lines, developing them further while Russia was involved with its revolution at home. As Russian power grew before World War II, the Japanese tied Korea's railroads more closely with the Manchurian system and extended the east coast rail line from Wonsan to Pusan. However, this line never was completed.

The peculiar blend of strategy and industrial expansion which has marked the development of the Korean railroads from their beginning has left its imprint in their layout and construction. Despite mountainous terrain, the trunk line from Pusan to Seoul has a maximum gradient of only 1 per cent, compared to gradients of 2 or 3 per cent in the American Rockies. Its two tracks usually fork out at the approach of ravines or rivers and cross over on separate bridges. At the main rivers there is often a third bridge to secure continuous flow of traffic, should one or two bridges be demolished. The





The main line from Pusan north to Seoul and Pyongyang was built to heavy-duty, military standards by the Japanese. The two tracks of the double-tracked main line are widely

separated, and twin bridges were used to cross all rivers and ravines so that if one is knocked out in combat, the other can still be used.

single-track railroad from Pusan to Seoul which passes through a series of valleys between 20 and 80 miles northeast of the double-track "backbone" line was built for purely strategic reasons.

The entire strategy of the North Korean invasion was aimed at gaining control of the South Korean railroads. Time has shown the advantage of this Russian policy. As the North Koreans drove southward against Pusan, most of their tanks, artillery and supplies were moved by rail. South Korean railway engineers were unable—or unwilling—to demolish bridges and tunnels or to cut tracks thoroughly enough to delay swift repair by efficient Russian-trained wrecking crews. Hundreds of Soviet GAZ and ZIS trucks were in evidence, but the railroads carried the bulk of military traffic and brought up fuel for the trucks.

Without control of the South Korean railroads the invaders never could have amassed the reserves of men and material which enabled them to hammer away at United Nations defenses in the narrow perimeter around Pusan and Masampo for weeks. During the battle of the perimeter every one of the main North Korean objectives—Taegu, Yongchon, Sunchon—was a junction or otherwise important point in the rail system.

To relieve pressure on Pusan, the United Nations air forces tried hard to disrupt the enemy's railroads through heavy bombardment. The enemy's rail lines to the south—which all converged at or around Seoul—were eventually cut by the landing at Inchon. Aerial bombardments apparently had not been sufficient to do the trick.

As United Nations forces gained the offensive following recapture of Seoul, the objectives of our bombers included the rail lines to Pyongyang and Wonsan over which the enemy received reinforcements and evacuated his battered forces from the south.

The destruction wrought by United Nations bombers on these missions, as described in various communiques, must have been tremendous. On January 31, 1951, head-

quarters in Tokyo reported that 198 enemy locomotives and 1,115 freight cars had been destroyed, and 174 locomotives and 1,747 freight cars damaged, by Allied bombing raids on the rail junctions of Haeryong and Onsong near the Siberian border. The locomotives destroyed or damaged exceeded the total locomotive fleet of all Korea before the war, and freight car casualties of 2,862 came close to the prewar total of 3,440.

After ten months of fighting and bombing as intensive as during the last years of World War II, rails remain the backbone of enemy transportation.

Another lesson to be drawn from the Korean railway war is that retreating land armies find it exceedingly difficult to destroy basic railroad facilities.

The Germans during their retreat from Russia were faced with the same problem. They even invented a special demolition machine which hacked away at rails and churned up the roadbed. Yet the Russians rebuilt their main railroads in little more than a year and their repair crews managed to operate field railways almost in the wake of the retreating enemy.

The chief lesson gained from the tactics of the Korean war of transportation is the leading role of the railways in almost any engagement overseas. Contrary to a widely held belief, railway operations may be of even greater importance in China and other industrially underdeveloped countries than they were after the landings in Europe. In the vast inlands of Asia and Africa railroads usually are the only means of surface transportation. It takes time to build highways capable of carrying continuous heavy traffic, and once the forces of the oceanic nations advance into the interior, they must bring up fuel for their motorized transportation.

Korea shows that in roadless overseas countries the main overland transportation burden remains with the railroads.

Sincerely yours,

JOHN

# Working on the Railroad(s)



## Some of the TELETYPE Products working on America's Railroads

Apparatus Cabinets  
Apparatus Consoles  
Display Copy Printers  
Distortion Test Sets  
Duplex Equipment Sets  
Extensors  
Line Relays  
Monopulse Printers  
Multiple Transmitters  
Numbering Transmitter Distributors  
Page Printers  
Paper Winders  
Party Line Station Selectors  
Perforator Transmitters  
Perforators  
Perforator Tables  
Portable Test Sets  
Printer Silencing Consoles  
Printer Tables  
Rectifiers  
Regenerative Repeaters  
Reperforators (Typing)  
Reperforators (Non-typing)  
Reperforator Tables  
Reperforator-Transmitter  
Combination Units  
Reperforator Transmitter Tables  
Receiving Apparatus Tables  
Sequence Selectors  
Stroboscopic Signal  
Distortion Test Sets  
Tape Printers  
Tape Winders  
Transmitting Distributors  
Transmitting Apparatus Tables  
Utility Cabinets

**T**ODAY Teletype printed communications systems are hard at work on 59 of America's railroads—increasing safety, improving efficiency and cutting costs.

Some of the Teletype products used by the railroads appear in the list to the right. No matter what the communication problems of your road may be, you'll find Teletype equipment to solve them.

**TELETYPE CORPORATION**  
1400 Wrightwood Avenue, Chicago 14, Illinois

**TELETYPE**  
CORPORATION  
SUBSIDIARY OF  
*Western Electric Company*





"The only restraint" on the power of railroad labor unions, said Mr. Richberg, "has been the fact that workers could join or quit unions as they chose. . . . This emergency board proposes to destroy that sole restraint."

## Union-Shop Report Called "Intolerable, Impossible"

***Richberg, attorney for southeastern roads, assails recommendations of emergency board which saw little merit in management's contentions***

**E**mergency-board recommendations that the railroads grant a union shop and dues-check-off arrangements to 17 unions representing their non-operating employees are "intolerable, impossible and bordering on the nonsensical," according to Donald R. Richberg, who was counsel for southeastern roads in proceedings before the board.

The statement by Mr. Richberg, a former attorney for many railroad labor unions, was the only immediate comment from the management side on the board's report which went to President Truman on February 14. As noted briefly in *Railway Age*, February 18, page 55, the board found "no sound reason for withholding the union shop and check-off from these 17 organizations."

In going along with the unions' position, the board made much of the fact that several roads have already signed union-shop agreements; and its call for a "national agreement" ignored the technical position of the railroads in the case.

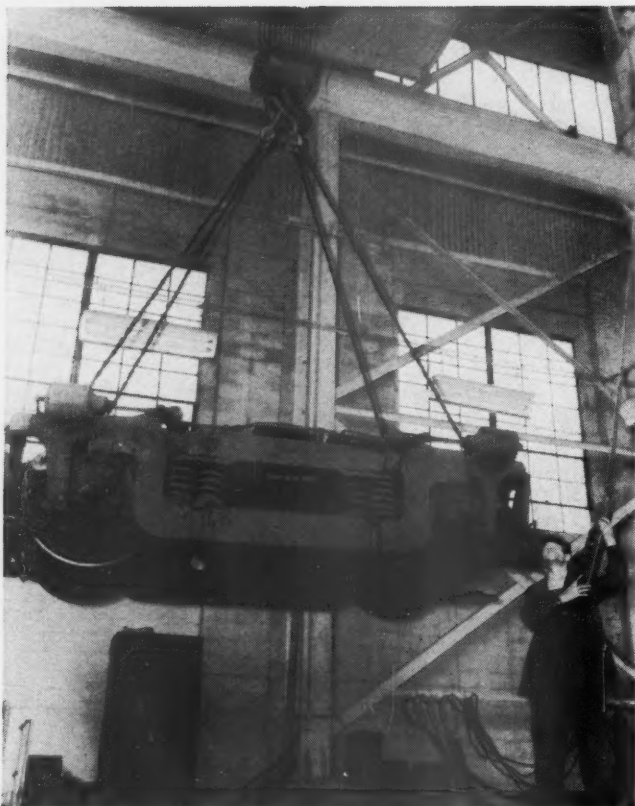
In the latter connection, there were some groupings and consolidated presentations, but the technical situa-

tion generally was such that the carriers were before the board on an individual-road basis. Thus such management reaction as had been indicated when this issue went to press was to the effect that the matter of accepting or rejecting the report was for determination by individual roads. Management has never rejected an emergency board report on a nationwide controversy, but rejection of such reports by the unions has become a habit since 1940.

Generally, the present board saw little merit in management's contentions, while it put sympathetic appraisals on most arguments advanced by the unions. This attitude was epitomized in statements, a few pages apart in the report, which said that the management arguments "have not been very convincing to us," but that "the 17 labor organizations before us have advanced sound and persuasive reasons in support of their request for union-shop agreements."

Members of the board were: Chairman David L. Cole; Aaron Horvitz; and George E. Osborne.

While the railroads raised issues as to employees to



"The board's report," Mr. Richberg also said, shows no "concern or safeguards for the worker who would have to submit to union domination or lose his job."

be covered, prospective liabilities and indemnifications therefor, and procedural problems in implementing union-shop agreements, nearly all of them stressed particularly their contentions as to the "illegality and unconstitutionality" of the proposed agreement. The board rejected all such contentions, concluding that its duty was to consider the unions' proposal "on its merits."

### Policy Not Considered

"To the extent that Congress has expressed or indicated a policy with reference to the union shop in the railroad industry," the report continued, "it is clearly beyond the scope of our authority to reconsider that policy. Many of the arguments most strongly advanced by the carriers would require that we do so. . . . The proposition . . . that, despite the 1951 change in the Railway Labor Act, under no circumstances whatsoever should a union-shop contract be recommended by an emergency board, must be emphatically rejected."

The report followed through to assert that the board's consideration of the issues had excluded "the arguments . . . which go to the question of policy or principle which have now been determined by the Congress." The "legislative policy" is an "unalterable fact," the report added.

The report's formal recommendation in favor of the union shop was a seven-part pronouncement which included the basic call for a national agreement and then went on to make suggestions as to scope of rules, procedures for discharge of employees who refuse to join up, stipulations as to liability and indemnification, and "miscellaneous protective clauses."

As a pattern for the national agreement it recommended, the board cited union-shop pacts already en-

tered by the New York Central and Baltimore & Ohio. It also cited the N.Y.C. agreement as a pattern for dues-check-off arrangements.

Check-off arrangements were left for further negotiations in the N.Y.C. agreement, but there was in the board's record information to the effect that the Boston & Maine, Portland Terminal, and Maine Central are paid for such work under their union-shop agreements with the Brotherhood of Railroad Trainmen. The board nevertheless asserted that "the carriers should not be compensated for making these deductions."

In reaching that conclusion the board was impressed by evidence as to the "prevailing practice in American industry"; and by union contentions to the effect that "savings" would result from avoidance of the "waste of time and energy now expended in dues collections," and that check-off records would give management the information it requires in dismissal cases. "These benefits seem real," the report said.

### "Simply Another Business Expense"

It went on to suggest that the carriers could bear the check-off cost because it would be "simply another item of business expense." This suggestion followed upon this statement: "If the costs of collecting dues come out of the union treasury it will mean almost certainly, if the cost is substantial, that the individual employees will have to pay for it in the form of increased dues."

The board's recommendations were based on 12 findings which were set out in the report, in part, as follows:

1. The union-shop amendment . . . is a congressional determination that the union shop and check-off are not contrary to public policy, nor inconsistent with the dominant purposes and principles of [the Railway Labor] Act, and that reasonable safeguards have been established to protect the freedom and job security of the non-union minority employees.

2. The congressional policy . . . is an unalterable fact; it is beyond the scope and authority of this board to undertake to express any judgment as to such policy.

3. The purposes and procedures of the . . . act . . . make it perfectly clear that this board should investigate fully all of the merits of a dispute over a request for a union shop and check-off. . . .

4. The emergency board makes no direct orders or binding decisions; it merely recommends what it believes to be a fair basis for agreement between the parties.

5. In stressing the difference between a recommendation by a government-appointed board and a voluntary agreement between management and labor, providing for a union shop, the employers overlook the essential fact that the non-union employee has no opportunity to express his wishes when the employer elects to make the agreement; no evidence was offered to show that the decisions of the employers in the railroad industry who have already entered into such agreements have been dictated by the preferences of the non-union minority of the employees rather than by the business interests of the employer.

6. The requests . . . for the union shop and check-off . . . follow closely the statutory provisions related thereto. . . .

7. On the merits of the proposal before us, viewed in fair perspective and in light of the national policies determined by Congress, we find no sound or substantial basis for withholding the union shop and check-off . . .; we believe that in the framework of the dispute before us the arguments in favor far outweigh those in opposition to the proposal before us for these reasons:

(a) Railroad employees have by law been denied the right to have these benefits since 1934.

(b) Congress has indicated that there is no public policy against the union shop and check-off.

(c) The union shop has been substantially adopted by American industry, and the trend is still in that direction. . . .

(d) The air transportation industry, also governed by the Railway Labor Act, has made several such agreements since the 1951 amendments.

(e) Before compulsory union membership was prohibited by the . . . Act in 1934, numerous carriers maintained company unions in which membership was compulsory and in which their dues were checked off.

(f) The facts that these labor organizations are now well established and responsible, and that they have made considerable progress without resorting to a strike in over 25 years are argu-



# use Vanadium Steels and Irons

You can obtain the mechanical properties required for satisfactory operation and long service life of Diesel locomotives by using Vanadium steels and irons.

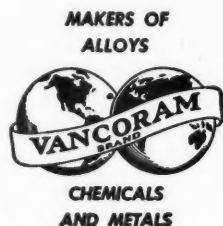
Vanadium steel forgings, as well as Vanadium iron castings, have been designed for the best balance of mechanical properties obtainable for the service required of each specific part.

Recommended steel and iron compositions are given in the accompanying list for a variety of parts, many of which have already established satisfactory service records. A choice of materials is shown in some instances, in recognition of preference and of those variations in design and type of service which govern the properties required.

The metallurgical engineers of the Vanadium Corporation of America realize that each part is an individual problem, and they are prepared to cooperate with you to the fullest extent in selecting the best material for each application.

• • •

Write for Data Sheet giving details of composition, heat treatment and mechanical properties of Vanadium steels and irons for various Diesel applications.



PART	MATERIAL
<b>STEELS</b>	
AXLES	C-V steel
BRAKE RIGGING CASTINGS	Mn-V cast steel
CAMSHAFTS	Cr-V (AISI 6120) steel
COUPLERS	Mn-V cast steel
CRANKSHAFTS	Cr-Mo-V (4140+V) steel Ni-Cr-Mo-V (4340+V) steel Cr-V (6140) steel Cr-V (50T46) steel C-V (1045+V) steel
ENGINE BLOCK BASE	Mn-V plate steel
EQUALIZERS	Mn-V steel
GEARS	Cr-V (6145) steel
INJECTOR TIPS	Cr-V (6145) steel
PISTON PINS	Cr-V (AISI 6120) steel
ROCKER ARMS	Mn-V cast steel
ROCKER ARM BRACKETS	Mn-V cast steel
ROCKER ARM SHAFTS	Cr-V (AISI 6120) steel
SPRINGS	Cr-V (AISI 6150) steel Cr-Mo-V steel
TRUCK FRAMES	C-V cast steel Mn-V cast steel Ni-V cast steel
<b>IRONS</b>	
CYLINDER HEADS	Mo-V cast iron, Graphidox-treated*
CYLINDER LINERS	Cr-Mo-V cast iron, Graphidox-treated* Mn-V cast iron
EXHAUST MANIFOLDS	Mo-V cast iron Cr-Mo-V cast iron, Graphidox-treated*
PISTONS	Ni-Mo-V cast iron, Graphidox-treated* Mo-V cast iron, Graphidox-treated* Ni-Cr-Mo-V cast iron, Graphidox-treated*

\*Graphidox is a graphitizing and deoxidizing alloy.

## VANADIUM CORPORATION OF AMERICA

420 LEXINGTON AVENUE, NEW YORK 17, N. Y. • DETROIT • CHICAGO • CLEVELAND • PITTSBURGH

ments for rather than against their right to have the union shop; such unions are most deserving of being entrusted with the union shop.

(g) The fact that these unions are now secure does not preclude their right to the union shop; such security may, as it has in the past, prove ephemeral. . . .

(h) No evidence was offered to indicate that union membership of railroad employees has impaired their loyalty to their employer; we believe that since the . . . Act gives to the unions the right and the duty to represent all employees within their respective crafts or classes, it is desirable that such employees participate, through membership activity in the unions, in helping to formulate sound policies and courses of action. . . .

(i) Solemn assurances having been given . . . that these labor organizations will not take advantage of the union shop to raise their charges to members beyond the point necessary to maintain normal union functions, . . . it would be a breach of faith to violate such assurances.

(j) Employees who have remained out of the unions but are willing to take the benefits of collective bargaining . . . are known as "free riders." This group as a consequence has been unjustly enriched.

(k) The railroad industry has not hesitated to treat freely with these unions in all matters concerning the employees . . . ; the carriers also enlist and receive the aid of these labor organizations in legislative programs. . . . Thus these organizations serve as a responsible and integral part of the industry.

(l) The fears expressed by the carriers that compulsory union membership would drive valuable trained employees out of the industry are not borne out by the experience of a number of railroads which have already made union-shop agreements. . . .

(m) The carriers themselves recognized the contribution toward stability and effectiveness which may be made by compulsory membership in the company unions maintained before 1934.

(n) At least seven of these 17 unions represent employees in other industries and their agreements in such industries very generally include the union shop.

(o) Some 40 carriers, including several who are disputing the request of these labor organizations, have recently made union-shop agreements with other unions; these carriers . . . employ over one-third of all railroad employees, and among them are some of the country's leading rail carriers (the Chicago, Burlington & Quincy, the Northern Pacific, the Illinois Central, the Denver & Rio Grande Western, the Lackawanna, the New Haven, and the Pullman Company).

(p) Railroads employing over 215,000 employees have made union-shop agreements with these 17 labor organizations in 1951; these include the New York Central, the Baltimore & Ohio, the Great Northern, and the Lehigh Valley.

8. After examining carefully into . . . legal objections . . . raised, we find that there is no substantial legal doubt that:

(a) The agreement proposed . . . is now authorized by the . . . Act. . . .

(b) The proposed agreement would not violate state laws, . . . since Congress explicitly overrode such laws.

(c) The union-shop amendment appears to be constitutional; in any event, it would not be for this board to question the constitutionality. . . .

(d) Possible discriminatory practices by some of these unions would not disqualify them from having the union shop, since Congress has protected the job rights of minorities against whom discrimination may be practiced. . . .

(e) The possession of the railroads . . . by the government . . . does not affect the normal functions of an emergency board.

9. For almost 20 years all major changes in wages, hours and working conditions in the railroad industry have been made effective with respect to the employees who are covered by the scope rules of the collective bargaining agreement between each carrier and labor organization . . . ; this board is not qualified to undo and remake such scope rules . . . nor to undertake to adopt a new measure of the employees to be covered by the new union-shop rule, except to the extent conceded by the organizations on the record.

10. There are several procedural and substantive problems concerned with the reasonable protection of all parties . . . for which provision should be made in a union-shop agreement.

11. The check-off is generally prevalent in American industry. . . .

12. Movements initiated in the past 20 years, by either the carriers or the labor organizations, . . . have been handled on a joint national basis. No sound or convincing reasons were advanced for handling this dispute in any other manner. . . .

### **The National-Handling Issue**

In discussing this national-handling issue, the report said that a remand of the cases to the individual roads "would entail negotiating a minimum of almost 400 agreements even though the 17 organizations were dealt

## **Unions "Vindicated," Will Demand Agreement—Leighty**

G. E. Leighty, president of the Order of Railroad Telegraphers and chairman of the "non-op" conference committee in the union-shop case, issued a February 19 statement, commenting on the emergency-board report, as follows:

"The report and recommendation vindicated the organizations in their basic position that the carriers meet with us nationally and make a union-shop and check-off agreement with us along the lines of agreements we have previously negotiated with a considerable number of railroads.

"The chief executives of the cooperating organizations met today and decided to call upon the carrier managements to follow customary procedure and meet with us promptly in national conferences to negotiate an agreement within the framework of the board's recommendation to dispose of the dispute."

with as a unit." It was further calculated that "the staggering total of approximately 6,800 agreements" would be involved if there should be separate bargaining with each union.

"The delay, waste and ineffectiveness of such a procedure," the report added, "are so apparent that it should be avoided unless extremely strong considerations demand it. The Mediation Board machinery, in point of manpower alone, would be incapable of functioning adequately if faced with disputes on so extensive a scale. The result could easily be to delay indefinitely or to defeat entirely the settlement of demands."

### **Unconstitutional, Richberg Says**

Mr. Richberg's "bordering-on-the-nonsensical" comment was addressed specifically to this national-agreement proposal. "How," he asked, "can a railroad in the Western territory and a railroad in the Southeastern territory enter into a joint agreement which would create joint obligations in relation to the employees of each of these two railroads? After all, railroad employees are in the service of some given railroad . . . and a group of railroads has no responsibility toward the employees of the individual railroad."

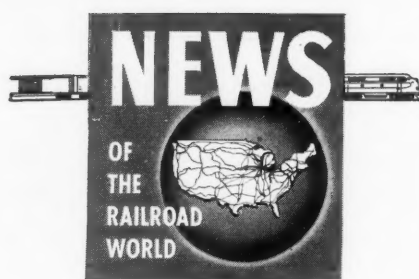
Mr. Richberg states further that he felt that the board "is attempting to endow the railroad unions with authority which could not be granted to any union by any law valid under the provisions for individual liberty which are written into the constitution of the United States." The remainder of the attorney's statement was as follows:

"The laws of the railroad unions deny their members free speech, free press, free exercise of freedom of assembly, and deprive them of the essentials of life, liberty and property without anything resembling 'due process of law.' The only restraint on them in the past has been the fact that workers could join or quit unions as they chose, and this emergency board proposes to destroy that sole restraint.

"No representatives of the federal government have any authority to recommend such a violation of the supreme law of the land. Not even Congress has the power to enact a law authorizing, or even permitting, under the color of a federal law, such an abridgement of fundamental liberties.

"The board's report shows great solicitude for the welfare and interests of the labor bosses but it can be read from beginning to end without finding any concern or safeguards for the worker who would have to submit to union domination or lose his job."





## Freight Car Loadings

Loadings of revenue freight in the week ended February 16 totaled 737,609 cars, the Association of American Railroads announced on February 21. This was an increase of 3,885 cars, or 0.5 per cent, compared with the previous week; a decrease of 2,948 cars, or 0.4 per cent, compared with the corresponding week last year; and an increase of 177,541 cars, or 31.7 per cent, compared with the equivalent 1950 week.

Loadings of revenue freight for the week ended February 9 totaled 733,724 cars; the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS			
For the week ended Saturday, February 9			
District	1952	1951	1950
Eastern .....	128,730	101,789	111,700
Allegheny .....	149,001	118,172	114,425
Pocahontas .....	60,334	46,573	20,608
Southern .....	134,850	107,153	105,776
Northwestern .....	79,994	51,213	68,456
Central Western .....	119,773	98,469	93,684
Southwestern .....	61,042	49,840	54,167
<b>Total Western Districts .....</b>	<b>260,809</b>	<b>199,522</b>	<b>216,307</b>
<b>Total All Roads .....</b>	<b>733,724</b>	<b>573,209</b>	<b>568,816</b>
Commodities:			
Grain and grain products .....	49,892	41,354	39,257
Livestock .....	8,171	4,871	7,650
Coal .....	148,795	118,820	52,362
Coke .....	15,654	14,220	10,645
Forest products .....	43,529	34,884	34,375
Ore .....	20,196	11,979	13,102
Merchandise l.c.l. .....	78,096	56,038	82,986
Miscellaneous .....	369,391	291,043	328,439
February 9 .....	733,724	573,209	568,816
February 2 .....	731,006	651,165	612,464
January 26 .....	727,933	784,166	635,934
January 19 .....	747,662	779,750	619,163
January 12 .....	742,757	783,015	629,543
<b>Cumulative total 6 weeks .....</b>	<b>4,293,049</b>	<b>4,233,732</b>	<b>3,571,673</b>

**In Canada.**—Car loadings for the seven-day period ended February 7 totaled 77,955 cars, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
February 7, 1952 ..	77,955	39,301
Cumulative totals for Canada:		
February 7, 1952 ..	410,675	193,524

## Truman Seeks to Hold Rail-Seizure Powers

President Truman has asked Congress to continue during the present emergency, various war powers, including that under which the railroads have been operated by the Army since August 27, 1950. The President's request was embodied in identical letters which he sent last week to Vice-President Barkley, as president of the Sen-

ate, and to Speaker Rayburn of the House.

The letter pointed out that ratification of the treaty of peace with Japan will end "the only state of war still existing between this country and others . . ." The law under which the railroads were seized is the Act of August 29, 1916, which authorizes the President to take them over "in time of war . . . through the secretary of war."

## New Write-Off Rules; More Certificates Issued

New regulations governing issuance of certificates of necessity for rapid tax amortization will become effective March 1, the Defense Production Administration announced last week.

Major change in the new regulations is the addition of a "pre-certification" provision. According to D.P.A.'s legal staff, this new provision will not apply to moving equipment, such as railroad rolling stock, but will apply on facilities "which will become real property."

This "pre-certification" rule will require applicants for accelerated amortization to secure a predetermination by D.P.A. as to shortage of facilities and "essentiality" of the product involved.

On projects costing more than \$100,000, this approval by D.P.A. must be obtained before construction begins. Going ahead without approval will bar a taxpayer from receiving accelerated write-off of the project, D.P.A. said. For projects of less than \$100,000, construction may begin upon filing an application for fast write-off, without prejudicing eligibility for such write-off.

Applications for certificates of necessity on equipment which will not be-

come a permanent part of any building, structure, or other real property may be filed up to six months after acquisition, D.P.A. said.

Meanwhile, D.P.A. has announced the award of additional certificates of necessity for the period January 19-25. Thirty-two railroads were included in this list.

The Pennsylvania was authorized to write off 70 per cent of a \$53,862,500 investment over a five-year period. Other roads for which approvals were made, together with the amounts involved, are listed below. The percentage figure shows in each case the percentage that can be written off in five years.

Atlanta & Saint Andrews Bay, \$300,000, 55 per cent.  
Atlantic Coast Line, \$19,876,275, 55 per cent; and \$1,137,750, 70 per cent.  
Baltimore & Ohio, \$9,800,000, 70 per cent.  
Blue Ridge Railway, \$283,089, 55 per cent.  
Buffalo Creek, \$5,920,000, 70 per cent.  
Chesapeake & Ohio, \$28,525,000, 70 per cent; and \$2,530,000, 50 per cent.  
Chicago, Burlington & Quincy, \$12,830,800, 70 per cent.  
Chicago & North Western, \$10,340,000, 70 per cent; and \$10,253,057, 55 per cent.  
Chicago Great Western, \$958,922, 55 per cent.  
Colorado & Southern, \$2,793,750, 70 per cent.  
Columbia, Newberry & Laurens, \$432,750, 55 per cent.  
Delaware, Lackawanna & Western, \$2,588,000, 70 per cent.  
Denver & Rio Grande Western, \$3,038,502, 70 per cent.  
Donora Southern, \$1,051,000, 55 per cent.  
Duluth, South Shore & Atlantic, \$1,303,067, 55 per cent.  
Fort Worth & Denver, \$1,425,000, 70 per cent.  
Great Northern, \$13,313,500, 70 per cent.  
Illinois Central, \$303,300, 70 per cent.

## PORT AUTHORITY TO LEASE NEW YORK TRUCK TERMINAL TO POST OFFICE DEPARTMENT

Because use of the New York Port Authority's \$10,000,000 New York Union Motor Truck Terminal by over-the-road truckers has fallen far short of expectation, the authority hopes to lease the terminal to the United States Post Office Department. Expectation of leasing the terminal was revealed in a recent statement by Authority Chairman Howard S. Cullman, who said the Post Office Department "is seeking truck terminal facilities for over-the-road mail and parcel post routes for a term of about three years."

The Newark (N.J.) Union Motor Truck Terminal, another authority facility, already has been leased to the Air Force. Mr. Cullman said the Newark facility's use as a public terminal for merchandise truck freight "was not possible due to a restrictive clause in the local labor contract." At Newark, as well as New York, he added, rentals from the two government leases will cover maintenance and debt service.

The New York truck terminal was opened November 28, 1949. The authority, under terms of 1931 legislation, pays \$34,415 to New York City annually in lieu of taxes and assessments. This amount equals the sums last paid on the property as yearly taxes before its acquisition by the authority for terminal purposes. Under the proposed plan of operation, according to a pre-opening booklet issued by the authority, the terminal was designed to handle an estimated daily maximum of about 2,000 tons of freight. At the end of 1949, the authority's annual report for that year said, seven carriers were operating there and others had agreed to start shortly after the first of 1950. One year later, according to the 1950 annual report, 21 trucking companies were utilizing the terminal and freight handled during 1950 had totaled 111,954 revenue tons—about 375 tons per working day—less than one-fifth the anticipated daily volume.

## CAR SURPLUSES, SHORTAGES

Average daily freight car surpluses and shortages for the week ended February 16 were announced by the Association of American Railroads on February 21 as follows:

	Surplus	Shortage
Plain Box .....	736	1,687
Auto Box .....	291	0
<b>Total Box .....</b>	<b>1,027</b>	<b>1,687</b>
Gondola .....	232	1,053
Hopper .....	2,298	442
Covered Hopper ...	293	0
Stock .....	2,390	16
Flat .....	284	623
Refrigerator .....	1,783	152
Other .....	322	50
<b>Total .....</b>	<b>8,629</b>	<b>4,023</b>

Lake Superior & Ishpeming, \$639,914, 55 per cent; and \$6,000, 40 per cent.

Lancaster & Chester, \$209,622, 55 per cent; and \$100,700, 70 per cent.

Monongahela Connecting, \$510,000, 55 per cent.

New York Central, \$17,350,000, 70 per cent; and \$3,132,284, 55 per cent.

Nashville, Chattanooga & St. Louis, \$159,989, 70 per cent.

Pittsburgh & Lake Erie, \$5,310,000, 70 per cent.

Seaboard Air Line, \$1,975,498, 70 per cent.

Southern Pacific, \$40,185,745, 70 per cent.

Tennessee Central, \$576,010, 55 per cent.

Toledo, Peoria & Western, \$300,000, 55 per cent.

Wabash, \$6,943,163, 70 per cent.

Western Pacific, \$3,355,000, 70 per cent.

Youngstown & Northern, \$99,286, 55 per cent.

## ORGANIZATIONS

### Treasury Division to Meet Sept. 9-11 at Swampscott

The next annual meeting of the Treasury Division of the Association of American Railroads will be held at the New Ocean House, Swampscott, Mass., from September 9 through September 11.

This was announced by Division Secretary E. R. Ford in a February 11 circular which also said that the customary "open-house" meeting of the Advisory Committee will be held on September 8. The division's chairman is F. H. Jeffrey, treasurer of the Chicago, Milwaukee, St. Paul & Pacific. Everett W. Smith, treasurer of the Boston & Maine, is chairman of the committee on arrangements for the meeting.

The 87th regular meeting of the Pacific Coast Transportation Advisory Board will be held on March

13 and 14 at the Biltmore Hotel, Los Angeles. James W. Harley, director of traffic, United States Rubber Company, New York, will be guest speaker at a luncheon sponsored jointly by the Los Angeles Transportation Club, the Los Angeles Traffic Managers' Conference, and the Women's Traffic Club of Los Angeles. The subject of his address will be "Industrial Traffic Management Interest in Transportation." The annual election of board officers also will be held.

The Transportation Club of Louisville will hold a forum meeting in the Kentucky Hotel on February 27 to discuss "routing guides." Both shipper and railroad representatives will be on the panel. James P. Haynes, manager of transportation for the Louisville Chamber of Commerce, will be the moderator.

The New England Shippers Advisory Board will hold its annual meeting on March 12 and 13, in the Hotel Statler, Boston, Mass. The program for the 13th will include a report from Washington by W. E. Callahan, manager of the Open Top section, Car Service Division, Association of American Railroads, and the annual election of officers. "Opportunities for Team Work" will be the subject of a luncheon address by Ralph M. Binney, president, Boston Chamber of Commerce, and vice-president, First National Bank of Boston.

The Federation for Railway Progress will hold its fifth anniversary dinner on March 20 at 6 p.m., in the Grand Ballroom of the Waldorf Astoria, New York. Martha Rountree and Lawrence Spivak, moderators of the TV program, "Meet The Press," and four newspaper men, will interview Frederic C. Dumaine, president of the New York, New Haven & Hartford; James K. Knudson, Defense Transport Administrator, and other leaders in the transportation field, on issues vital to the industry today.

## SUPPLY TRADE

K. A. Craig and P. W. Lampton, representatives of the Hunt-Spiller Manufacturing Corporation have been appointed assistant sales managers.

A. L. Sutherland, formerly with Manning, Maxwell & Moore, has joined the sales department of C. Raymond Ahrens, Inc., as chief engineer, representing the company in the New York area.

J. R. Lewis has been appointed general sales manager of the Quaker Rubber Corporation, division of the H. K. Porter Company, Philadelphia.

## RED CROSS, GEN. RIDGWAY HAIL W. P. BLOOD CAR

On the first anniversary of operation of the Western Pacific's blood procurement car—last month—President F. B. Whitman received telegrams of congratulations from E. Roland Harriman, president of the American Red Cross, and Lt. Gen. Matthew B. Ridgway, commander of United Nations forces in Korea.

Said General Ridgway: "This selfless public service, together with the generous response of the donors, have made an immeasurable contribution to the well-being of the sick and injured of the United Nations Command."

Said Mr. Harriman: "The pioneer spirit and imagination with which this project was conceived and carried out has been an inspiration to us all. The many national tributes your organization has received for this humanitarian service are richly deserved. The record of accomplishment speaks for itself. Please accept our congratulations and best wishes for your continued success."

The car and the service it performs were described by *Railway Age* January 22, 1951, page 36, and February 5, 1951, page 56.

Mr. Lewis has been with Quaker Rubber for more than 11 years and has worked successively as Philadelphia district sales manager, assistant sales manager and assistant general sales manager. In his new position, he will be in complete charge of the sales organization of the company.

C. E. Dietle has been appointed manager of the diesel sales division of Fairbanks, Morse & Co. He started with the company as a salesman in 1926, spending several years in the Detroit and Toledo areas. He was transferred to Chicago in 1944, and was named diesel department manager of the Chicago branch prior to his recent promotion.

J. Donald Hadden, Pittsburgh, has joined the Walton R. Collins Company and the Collins Oil & Manufacturing Co. to handle Rust-Oleum products and Hanlon & Wilson Company Bonds. Mr. Hadden formerly was with the Universal Cyclops Steel Company and also was production engineer with the United States Army Ordnance department.

John F. Corcoran has been appointed director of sales for the Union Asbestos & Rubber Co., with offices in Chicago. Mr. Corcoran was associated with several investment and construction business firms before joining the American Locomotive Company in New York in 1940. He served that company at Washington, D. C., and Atlanta, Ga., and in 1948 was transferred to the Chicago office as assistant to the vice-president. In 1950 he





## When there's a smarter way to do it... Great Northern will have it!

Where would you go for ideas if you wanted to find the finest modern system for heavy materials handling? You couldn't make a better choice than the Great Northern Railway.

Along its 8,314-mile route, Great Northern handles enormous tonnages of ballast, timber, ties, steel and everything it takes to make a railroad go. The efficiency of this work is admired far and wide. And one reason is *modernization*, including use of American Locomotive Cranes.

The principle of the crane-on-rails is an old one; but today's American DiesELectric, for instance, is as different from old

steam cranes as night is from day. In power, speed, flexibility and economy, these splendid new Americans are like entirely new machines. *One man* is all the crew needed. "Down" time has been virtually eliminated. Upkeep expense has been cut to astonishing lows.

In planning for modernization, then, put your money on the locomotive crane. And to be sure of long-lived dependability . . . lowest cost per ton of load moved . . . look to the name AMERICAN. These cranes are built in Diesel and DiesELectric types, capacities from 25 to 80 tons.

2602

69

*Modernize...economize...with*  
**American Hoist  
& Derrick Company**  
ST. PAUL 1, MINNESOTA



For the  
**BIG PRODUCTION**  
jobs of industry...  
**AMERICAN  
LOCOMOTIVE  
CRANES**

opened his own office in Washington, and represented several firms in the railway supply industry, including Union Asbestos & Rubber, Standard



John F. Corcoran

Railway Equipment Manufacturing Company, Spring Packing Corporation, Peerless Equipment Company, and Pyle-National Company.

**Karl F. Baumann** has been appointed vice-president in charge of sales for the **Warren Tool Corporation**, Warren, Ohio. Mr. Baumann was graduated from the University of Wisconsin in 1930 and shortly after joined Globe Union, Inc., of Milwaukee, where he worked successively as personnel manager, special assistant to vice-president in charge of sales, and assistant



Karl F. Baumann

sales manager. In 1944 he joined Warren Tool as assistant sales manager and in 1947 was transferred to Warren, Ohio, as works manager.

## OBITUARY

**Joseph C. Snyder**, vice-president in charge of sales for the Pullman-Standard Car Manufacturing Company, died on February 17.

**Clarence B. Flint**, former vice-president and director of the National Aluminate Corporation, died on February 14 at Vero Beach, Fla. Mr. Flint had partially retired on January 1, 1951.

## EQUIPMENT AND SUPPLIES

### FREIGHT CARS

The **Carbon County** has ordered 200 70-ton triple hopper cars from the Greenville Steel Car Company.

### SIGNALING

The **Norfolk & Western** has ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company relays, rectifiers, transformers and housings, to be used in connection with installation of flashlight-light highway crossing signals at Lyndhurst, Va. Field installation will be handled by railway forces.

The **Pennsylvania** has ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company new wayside signal material to be used in connection with installation of cab signaling on 50 miles of single track between Xenia, Ohio, and New Paris. The order includes styles PL-3 position-light signals, SL-26 electric switch locks, relays, rectifiers, transformers, switch circuit controllers and housings. Field installation will be handled by railroad forces.

## ABANDONMENTS

Application has been filed with the I.C.C. by:

**MURFREESBORO & NASHVILLE.**—To abandon its entire line from Murfreesboro, Ark., to Nashville, 14.97 mi. The application stated there is not enough business to pay operating expenses, net losses having been incurred in each of the past three years.

Division 4 of the I.C.C. has authorized:

**CHICAGO, BURLINGTON & QUINCY.**—To abandon a branch line from Sedan, Iowa, to Unionville, Mo., 24.3 miles. The line has operated at a loss for the past two years.

## CONSTRUCTION

**Atchison, Topeka & Santa Fe.**—In connection with remodeling of facilities at Corwith yard, Chicago, the Harvey Wrecking Company, Chicago, has been awarded a contract to dis-

mantle and dispose of certain buildings and structures.

### Northern Pacific—Union Pacific.

—U.S. Army engineers at Walla Walla, Wash., expect to open bids in March for both highway and railroad relocations within the flood basin area of McNary dam. The project calls for removal of tracks of the N. P. and U. P. to higher elevations, and construction of two new sections of line which will be owned and used jointly by the two roads. One of these sections will lie between Attalia and Villard, 7 miles, and the other, located east of Wallula, involves use of a segment of the N.P.'s Pendleton branch. It is planned that both of these joint operations will be controlled by a single C.T.C. machine to be located at Attalia. The contract to be let in March involves rail and highway routes along the Columbia and Walla Walla rivers north and east of Wallula. It is expected that the roadbeds will be completed late this year.

**Pennsylvania.**—The Westinghouse Electric Corporation will supply about \$350,000 worth of electrical equipment for two ore unloading towers being built by the Industrial Brownhoist Company for installation at this road's new pier in South Philadelphia (*Railway Age*, April 8, 1950, page 712). The towers, to be used for unloading import ore for transshipment by rail, will each be capable of handling 1,200 long tons per hour of 150-lb.-per-cubic-ft. ore on a 45- to 50-second duty cycle. Two aprons will permit unloading from either side of the pier.

## FINANCIAL

### Chicago, Burlington & Quincy.

**Spur Track Operation.**—Division 4 of the I.C.C. has authorized this road to operate its 9.1-mile spur track between Lewistown, Ill., and South Liverpool. The line was constructed late in 1947, but the Burlington did not seek I.C.C. authority because it considered the line exempt under the Interstate Commerce Act. In the present proceedings, the commission dismissed the road's "lack of jurisdiction" motion. Coal moving over the line is shipped via barge from South Liverpool. (*Railway Age*, August 13, 1951, page 74).

### Chicago Great Western.—Track-

**age Rights.**—Renewal of an existing agreement between this road and the Chicago, Burlington & Quincy, covering use of a 0.9-mile C.B.&Q. segment between Galena Junction, Ill., and Portage Curve, has been approved by the I.C.C. The renewed agreement is for 10 years from January 1, 1951. The original agreement dates from 1888. (*Railway Age*, July 30, 1951, page 54.)



# ICC amendment permits big space savings through use of microfilming

You can now destroy certain accounts, records and memoranda after a two year period *if they are put on microfilm* — save as much as 99% of valuable storage space — as the result of an amendment that was passed recently to the 1945 regulations of the Interstate Commerce Commission.

And, with Remington Rand's exclusive Microdex system, your microdexed records can be indexed for instant finding as explicitly required by ICC

regulations. Microdex cuts film-searching time up to 98% — permits you to index your records right on the film just as you would in a regular file drawer.

You can get absolute record protection, too, by microfilming. Photograph all of your records on microfilm and store the film copies in a separate location. Regardless of the damage to which your original records are exposed, the microfilmed copies will be protected.

## new dual film-a-record speeds, simplifies microfilming: offers greater flexibility

The great new Dual Film-a-record definitely gives you the *most* in efficient and economical microfilming.

**It's Fast**—up to 500 check-size documents can be micro-filmed per minute — either one side only or both sides simultaneously.

**It's Accurate** — special separating rolls separate documents avoiding overlaps.

**It's Flexible**—substitute lens units—available in 3 different reductions—are instantly interchangeable using 16mm or 35mm film.

**It's Versatile** — an exclusive 15" paper-feeding throat permits filming up to 14<sup>3</sup>/<sub>8</sub>" of printed area—duplicate rolls of film may be microfilmed simultaneously.

**It's Efficient** — documents are ejected at eye level in the same order they are filmed.

Find out how simple and economical microfilming can be—get your free copy of booklet F-264 today. Write to Room 1671, Remington Rand Inc., 315 Fourth Ave., New York 10, N. Y.



the first name in business photography **Remington Rand**

**Chicago, Rock Island & Pacific-Fort Worth & Denver.—Joint Operation.**—The I.C.C. has approved an agreement between these roads, providing for pooling of service, traffic and earnings on their so-called Joint Texas Division. This division extends from Fort Worth, Tex., to Galveston. It includes the trackage of the Burlington-Rock Island, a line which already is jointly leased by these roads. The I.C.C. found that the new arrangement would have "little if any effect upon the volume of traffic or total revenues of either of the applicants." The approved agreement is dated June 20, 1951.

**Colorado & Southern.—Refinancing Approved.**—United States Circuit Judge Orie L. Phillips, acting for a special court, has approved a proposed capital simplification program for the C. & S. Basically, the plan calls for refunding outstanding debt by a new \$17-million first mortgage bond issue to mature in 30 years and to be sold through competitive bidding. Prior to issuance of the bonds, the C.&S. corporate structure will be streamlined so that ownership will be held only by the two operating companies (C.&S. and Fort Worth & Denver), rather than by nine corporations as at present. The program includes an annual sinking fund of \$425,000 for retirement of the new bonds. Proceeds from the bond sale will be used to retire an F.W.&D. note of approximately \$4,340,000 held by the Reconstruction Finance Corporation, while \$12,572,117 will go to the C.&S. in part consideration for transfer of capital stock, bonds and obligations of seven Texas companies. Of that amount, the C. & S. will use some \$6,688,500 to purchase all its refunding and extension mortgage bonds from the R.F.C. for retirement and funds remaining (about \$5,883,617) would be used to retire publicly held general mortgage bonds. The program has not yet been submitted to the I.C.C. for approval.

**Dallas Terminal Railway & Union Depot Co.—Bond Extension.**—The I.C.C. has authorized this company to extend, from January 1, 1952, to July 1, 1990, the maturity date on \$731,000 of first mortgage, 5 per cent gold bonds. The bonds are owned by the St. Louis Southwestern (*Railway Age*, January 14, page 234.)

**Great Northern.—Trackage Rights.**—Acquisition of trackage rights by this road over a 32.3-mile segment of the Oregon-Washington Railroad & Navigation Co. (Union Pacific) between Spokane, Wash., and Fairfield, has been approved by the I.C.C. At the same time, the commission authorized the G.N. to abandon about 22.9 miles of existing trackage, from Spokane to Mt. Hope. The difference in mileage between these two routes is due in part to the fact that five or six miles of present G.N. trackage,



Acme

**NEW RAIL** from the rehabilitated mills of western Europe goes into place on a war-damaged line in Greece. Note the steel sleepers—a characteristic sight in timber-shy areas of southeastern Europe as well as in central and northern Africa.

from West Fairfield to Mt. Hope, will be retained as a stub-end track to serve Mt. Hope. The G.N. will construct short connecting tracks at Spokane and Fairfield to enable it to reach the U.P. segment. Reason for this change in G.N. trackage is the heavy maintenance costs involved in keeping the existing G.N. line in shape to handle traffic. There are 15 timber and timber-steel bridges, and the topography of the area gives rise to frequent embankment failures.

**Illinois Central.—New Director.**—Edwin J. Spiegel, of St. Louis, president of the Gaylord Container Corporation, has succeeded the late General Clifford W. Gaylord, former president of the Gaylord corporation, as a director of the I.C.

**Long Island.—Reorganization.**—Nassau county, in New York state, has filed with the I.C.C. a brief saying that the plan of reorganization for the Long Island proposed by the Pennsylvania is "impracticable and should be dismissed." The brief was joined in by Suffolk county.

**Pennroad Corporation.—Annual Report.**—Net income of this company, excluding net realized gain on investments, was \$2,340,655 in 1951, compared with \$2,532,914 in the preceding year, according to the recently released annual report. In addition, there were net realized gains on sales of investments of \$7,749,618, including a profit of about \$5,775,000 from sale of Detroit, Toledo & Ironton stock. Net realized gains on sales of investments in 1950 were \$1,292,314. On December 31, 1951, Pennroad's net as-

set value was \$65,108,411, equal to \$13.02 a share, compared with \$66,470,960, or \$13.29 a share, on December 31, 1950. Portfolio changes during the second half of 1951 included purchase of 15,000 Northern Pacific common shares (increasing ownership of this issue to 25,000 shares), and sale of 20,000 shares of Pittsburgh & West Virginia common stock (reducing ownership of the issue to 203,479 shares).

**Rutland.—Trackage Rights.**—This road has applied to the I.C.C. for approval of a trackage rights agreement covering segments of the Boston & Maine, the Troy (N.Y.) Union, and the New York Central. The Rutland is seeking authority to abandon its own line between Bennington, Vt., and Chatham, N. Y., approximately 57.3 miles, and wishes to acquire trackage rights for movement of overhead traffic between the same two points. The Rutland's application said its own line has been operated at substantial losses, and substitution of the alternate route will enable it to provide convenient and satisfactory service "at substantially less cost."

The agreements with the B.&M., Troy Union, and N.Y.C. provide generally that the Rutland shall pay \$2 a train-mile, plus the cost of materials or service furnished by the owning roads. The agreements are for ten years. The Rutland would no longer provide local service at points between Chatham and North Bennington.

The B.&M. segment is from White Creek, N. Y., to Troy, approximately 30 miles, and the N.Y.C. segment, about 28 miles, extends from Troy to Chatham. The Troy Union segment is about 1.7 miles within that city.

**St. Louis, Brownsville & Mexico.—Trackage Rights.**—Division 4 of the I.C.C. has given final approval to this road's application for authority to operate over approximately 8.3 miles of Brownsville Navigation District trackage at Brownsville, Tex. The division withheld final approval until this road agreed that its use of the trackage would not bar similar use by the Texas & New Orleans, should the latter eventually gain access to the area. In making this "concession," the St.L.B.&M. said it did not waive its right to protest any effort by T. & N.O. to extend its present lines so as to gain access to the navigation district (*Railway Age*, January 14, page 236). T.&N.O. lines at present are about six miles away.

## Investment Publications

[The surveys listed herein are for the most part prepared by financial houses for the information of their customers. Knowing that many such surveys contain valuable information, *Railway Age* lists them as a service to its readers, but assumes no responsibility for facts or opinions which they may contain bearing upon the attractiveness of specific securities.]

**Baker, Weeks & Harden**, One Wall st., New York 5.

*Chicago & Eastern Illinois*. Progress Report, February 8.





**MORE FOLLOWERS  
EVERY MONTH!**

**FAIRBANKS-MORSE**  
*Opposed-Piston Diesel Locomotives*

More and more often you'll see a Fairbanks-Morse locomotive at the "head end" of all classes of trains—from heaviest duty freight to de luxe high-speed streamliner.

The reasons for this increasing acceptance are many . . . but high among them are the Opposed-Piston engines that power all Fairbanks-Morse locomotives. Fairbanks-

Morse Opposed-Piston Diesel engines have fewer moving parts—fewer parts to wear out and replace. They have a background of development and use totaling over 5,000,000 hp. They have a future in the railroad world even more promising than their impressive past. Fairbanks, Morse & Co., Chicago 5, Illinois.



**FAIRBANKS-MORSE,**

*a name worth remembering*

DIESEL LOCOMOTIVES AND ENGINES • PUMPS • SCALES  
ELECTRICAL MACHINERY • RAIL CARS • FARM MACHINERY  
HOME WATER SERVICE EQUIPMENT  
MAGNETOS



**Fahnestock & Co.**, 65 Broadway, New York 6.

*Chicago, Rock Island & Pacific Railroad.* Weekly Review, February 11.

*Southern Pacific Co.* Weekly Review, February 4.

**Smith, Barney & Co.**, 14 Wall st., New York 5.

*Florida East Coast Railway Company*, First & Refunding 5s, 1974. Railroad Bulletin No. 81. February 11.

*Railroad Stock Exchange Suggestion.* Railroad Bulletin No. 82. February 13.

**Vilas & Hickey**, 49 Wall st., New York 5.

*Minneapolis, St. Paul & Sault Ste. Marie R.R. Co.* February 8.

*Pennsylvania Railroad.* January 29.

**Weinress & Co.**, 231 South LaSalle st., Chicago 4.

*General American Transportation Corporation.* Common Stock. December 1951.

## New Securities

Application has been filed with the I.C.C. by:

**CHICAGO, ROCK ISLAND & PACIFIC.**—To assume liability for \$6,000,000 of equipment trust certificates to finance in part acquisition of equipment, listed below, expected to cost a total of \$8,025,074.

	Description and Builder	Estimated Unit Cost
6	2,250-hp. diesel-electric passenger locomotive units (Electro-Motive Division, General Motors Corporation) .....	\$233,885
10	1,500-hp. "general-purpose" diesel-electric locomotive units (Electro-Motive) .....	148,670
500	70-ton gondola cars (American Car & Foundry Co.) .....	5,820
400	50-ton box cars (A.C.F.) .....	5,563

The certificates, dated April 1, would mature in 30 semiannual installments of \$200,000 each, beginning October 1. They would be sold by competitive bids, with interest rate to be set by such bids.

**MISSOURI PACIFIC.**—To assume liability for \$3,675,000 of equipment trust certificates to finance in part equipment, listed below, expected to cost a total of \$4,612,106.

	Description and Builder	Estimated Unit Cost
22	1,500-hp. diesel-electric road switching locomotive units (Electro-Motive Division, General Motors Corporation) .....	\$154,795
7	1,200-hp. diesel-electric switching locomotive units (Baldwin-Lima-Hamilton Corporation) .....	102,128
2	2,250-hp. diesel-electric passenger locomotive units (American Locomotive-General Electric Companies) .....	234,176

The certificates, dated March 1, would mature in 15 annual installments of \$245,000 each, beginning March 1, 1953. They would be sold by competitive bids, with interest rate to be set by such bids.

**Division 4 of the I.C.C. has authorized:**

**ILLINOIS CENTRAL.**—To assume liability for \$4,110,000 of series HM equipment trust certificates to finance in part acquisition of 1,000 gondola cars at an estimated cost of \$5,500,000 (*Railway Age*, January 21, page 56). Division 4 approved sale of the certificates for \$9,549 with interest at 2 7/8 per cent—the bid of Halsey, Stuart & Co., and three associates—which will make the average annual cost of the proceeds to the road approximately 2.95 per cent. The certificates will mature in 30 semiannual installments of \$137,000 each, beginning August 1. They were reoffered to the public at prices yielding from 2 to 3 per cent, according to maturity.

## Security Price Averages

	Feb. 19	Prev. Week	Last Year
Average price of 20 representative railway stocks	55.22	56.80	58.41
Average price of 20 representative railway bonds	91.93	92.08	100.30

## Dividends Declared

**CHESAPEAKE & OHIO.**—common, 75c, payable March 20 to holders of record February 29; 3 1/2% convertible preferred, 87 1/2 cents, payable May 1 to holders of record April 4.

**CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.**—\$5 preferred, payable March 20 to holders of record February 29.

**COPPER RANGE.**—20c, quarterly, payable March 14 to holders of record February 21.

**ERIE & PITTSBURGH.**—7% guaranteed, 87 1/2c, quarterly, payable March 10 to holders of record February 29.

**NORTHERN PACIFIC.**—75c, payable April 25 to holders of record April 3.

**PITTSBURGH, YOUNGSTOWN & ASHTABULA.**—7% preferred, \$1.75, quarterly, payable March 3 to holders of record February 20.

**VIRGINIAN.**—62 1/2c, quarterly, payable March 25 to holders of record March 11.

## RAILWAY OFFICERS

### EXECUTIVE

**Neil S. Lantzy** has been elected vice-president and general manager of the WASHINGTON & OLD DOMINION at Arlington, Va., effective March 1, succeeding **George C. Baggett**, whose retirement was reported in *Railway Age* February 18.

**David C. Ferguson** has been appointed to the newly created position of assistant vice-president, yards and terminals, of the SOUTHERN, at Atlanta, Ga., heading a new department which will have general supervision of the railway's yard and terminal operations (*Railway Age*, February 18, page 17). Mr. Ferguson was born on November 10, 1903, in Georgia, and entered the service of the Southern in December 1918 as a clerk at Macon.



David C. Ferguson

He later served as chief clerk, yardmaster, chief timekeeper and assistant trainmaster at Macon. In July 1941 he was appointed general yardmaster at Birmingham, Ala., and in August 1942, became superintendent of terminals at Meridian, Miss., later transferring to Chattanooga, Tenn., Birmingham and Knoxville. Mr. Ferguson was named superintendent terminals at Atlanta in March 1950, which position he held until his recent appointment.

## FINANCIAL, LEGAL & ACCOUNTING

**Lander W. Butterfield**, attorney for the ATCHISON, TOPEKA & SANTA FE at Los Angeles, has been appointed general attorney at Chicago.

**Leonard R. Tanner**, assistant treasurer of the RAILWAY EXPRESS AGENCY, has been appointed treasurer, at New York, succeeding **Walter H. Johnson**, whose death was reported in *Railway Age* February 11. Mr. Tanner has been in the express business all of his business life, starting with the Southern Express Company, a predecessor of R.E.A., at Nashville, Tenn.



Leonard R. Tanner

He has been connected with the operating, accounting and treasury departments of the company, and has served as district accountant at Louisville, Ky., Chattanooga, Tenn., and Cincinnati, Ohio, and as assistant treasurer for the Central departments of R.E.A. at Chicago. Mr. Tanner is a director of the Expressmen's Mutual Life Insurance Company and a member of its Securities Committee.

**F. W. Lippert**, general accountant for the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, has been appointed assistant to comptroller. **J. T. Martin**, assistant general accountant, has been appointed general accountant. Both are headquartered at Chicago.

### OPERATING

**F. L. Campion**, assistant superintendent of the Cedar Rapids division of the CHICAGO, ROCK ISLAND & PACIFIC, has retired after 42 years of service.

**Winston Tompkins**, supervisor of the MISSOURI PACIFIC's service bureau, at St. Louis, has been appointed manager of the bureau, succeeding **G. O. Herbert**, retired (*Railway Age*, February 4). Mr. Tompkins started his railroad career with the M.P. in 1924, and held the positions of clerk, secre-



tary, and traveling car agent until 1948, when he became assistant supervisor, freight car distribution. Subsequently he was named secretary to chief operating officer, and in 1950 was appointed supervisor, service bureau.

Mr. Herbert entered railroad service in 1899 as yard clerk for the Terminal Railroad Association of St. Louis. He joined the M.P. in 1904 as traveling demurrage inspector at Little Rock, Ark., and came up through the ranks to be appointed manager of the service bureau in 1947.

**T. W. Goolsby** has been appointed acting superintendent of the Pecos division of the ATCHISON, TOPEKA & SANTA FE, at Clovis, N. M., in place of **D. Trahey**, who is on leave of absence. **L. P. Heath** has been appointed acting trainmaster, Pecos division.

**E. S. Ulyatt**, assistant general superintendent of transportation of the NORTHERN PACIFIC, at St. Paul, has been appointed acting general superintendent of transportation, succeeding **Robert E. Mattson**, who has been granted a six-months' leave of absence to serve as consultant to the Coras Iompair Eireann (Irish Transport Company) at Dublin (see General news columns). **E. L. Martin**, assistant to the general superintendent of transportation, will take over Mr. Ulyatt's duties.

**Benjamin F. Biaggini**, superintendent of the PULLMAN COMPANY at New Orleans, has been appointed manager of Mexican operations at Mexico City. **Eugene J. O'Neill**, assistant superintendent at St. Louis, succeeds Mr. Biaggini.

**Henry C. Bitner**, brakeman for the ST. LOUIS-SAN FRANCISCO, at Pittsburg, Kan., has been promoted to safety supervisor, succeeding **V. C. White**, who has been named assistant superintendent of the River division.

**M. D. Partelow**, superintendent of weighing, inspection, demurrage and storage of the ILLINOIS CENTRAL, has been appointed superintendent of stations at Chicago, succeeding the late **W. M. Hale**. Mr. Partelow's former position has been abolished, the superintendent of stations having been given jurisdiction over this department.

**J. Dalton** has been appointed assistant to general manager of the ST. LOUIS-SAN FRANCISCO, at Springfield, Mo.

**J. F. Orlomoski**, assistant superintendent of the Chicago division of the CHICAGO, ROCK ISLAND & PACIFIC, has been appointed superintendent of the division, with headquarters at Blue Island, Ill. **J. H. Lloyd**, superintendent of the Arkansas division, has been

transferred to Cedar Rapids, Iowa. **F. E. Wheeler**, superintendent of the Chicago division, succeeds Mr. Lloyd at Little Rock, Ark. Mr. Orlomoski came to the Rock Island as a switch-tender in 1924. He has served at Enid, Okla., Estherville, Iowa, Joliet, Ill., and Blue Island, and at Kansas City, Kan.

**H. V. Brown**, superintendent of the Oklahoma division of the CHICAGO, ROCK ISLAND & PACIFIC, has been transferred to the Western division at Fairbury, Neb. **A. B. Harrison**, superintendent of the Panhandle division at Liberal, Kan., succeeds Mr. Brown at El Reno, Okla. **H. G. Dennis**, district maintenance engineer at Kansas City, Kan., succeeds Mr. Harrison at Liberal.

As reported in *Railway Age* January 21, **R. C. Williams** has been promoted to assistant general manager of the Southern district of the MISSOURI PACIFIC. He started his railroad career in 1901 with the Chicago & Eastern Illinois, joining the M.P. in 1904 as telegraph operator. He advanced success-



R. C. Williams

ively to dispatcher, chief dispatcher, trainmaster and acting superintendent of the Joplin division. In July 1924 Mr. Williams became superintendent of the Missouri division, subsequently holding that position on the Memphis, Illinois, St. Louis Terminal and Arkansas divisions, successively.

**Lawrence E. Lueders** has been appointed terminal trainmaster of the CENTRAL OF GEORGIA at Atlanta, Ga.

## TRAFFIC

**Carl H. Mertens**, whose appointment as manager of the department of tours of the CHICAGO & NORTH WESTERN-UNION PACIFIC was announced in *Railway Age* February 4, page 102, entered railroad service with the U.P. in 1917 as clerk in the auditor of passenger accounts' office at Omaha. After

working as assistant accountant, ticket seller at Chicago, and tour escort, he joined the U.P. office in San Francisco and subsequently became ticket agent, chief clerk and city passenger agent. In 1946 he became district passenger agent at Chicago, and served in this capacity until his recent appointment. Mr. Mertens was president of the American Association of Railroad Ticket Agents from 1941 to 1946.

**W. A. Watson**, foreign freight agent of the CANADIAN NATIONAL at Toronto, has been appointed traffic manager, foreign freight department, at Montreal, succeeding the late **F. J. Stock**.

**F. C. Lyon** has been appointed assistant to general freight agent of the ATLANTIC COAST LINE at Wilmington, N. C., succeeding **L. J. LaSure**, who has been promoted to assistant general freight agent there.

**J. M. Roberts**, assistant general freight agent of the Pacific region of the CANADIAN PACIFIC at Vancouver, has been promoted to general freight agent at Montreal. **F. S. Harvey**, chief of the freight tariff and division bureau of the Prairie and Pacific regions at Winnipeg, has been named assistant general freight agent at Vancouver. **C. Baron**, head of the rate section of the Pacific region at Vancouver, succeeds Mr. Harvey.

**John P. Obenberger** has been appointed chief of tariff bureau of the CHICAGO NORTH SHORE & MILWAUKEE, succeeding **Henry L. Held**, retired.

**B. S. Randall** has been appointed district freight and passenger agent of the SOUTHERN at Albany, Ga. The commercial agency at Cordele, Ga., formerly held by Mr. Randall, has been abolished.

**Joseph S. Davis** has been appointed assistant general freight agent of the CHICAGO, INDIANAPOLIS & LOUISVILLE at Indianapolis. The position of division freight agent has been abolished. **Charles R. Phillips** has been appointed industrial agent at Chicago.

**George F. Quinlan**, assistant general agent for the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at Chicago has been appointed general agent at St. Paul, succeeding **Roy A. Burns**, who died on January 23.

**A. F. Huni**, general freight agent of the NEW YORK, NEW HAVEN & HARTFORD, at Boston, has resigned to become traffic director of the Glass Container Manufacturers Institute at New York. Mr. Huni was born at New Haven, Conn., and entered the service of the New Haven in 1923 in the freight traffic department. He was engaged in rate and statistical duties until 1934, when he was appointed commerce assistant, representing the rail-

road in cases before the I.C.C. and state regulatory bodies. In 1941 he was appointed assistant general freight agent and in 1947 became general freight agent, the position he left on February 15.

As reported in *Railway Age* February 4, page 100, **E. Candler Jones** has been appointed assistant freight traffic manager of the CENTRAL OF GEORGIA at Atlanta, Ga., succeeding **Frank M. Tuttle**, appointed general traffic consultant. Mr. Jones was born at Waynesboro, Ga., and entered the service of the C. of Ga. as statistical clerk at Savannah on March 5, 1921. He subsequently advanced through the positions of trace clerk, traveling freight agent, commercial agent and division freight agent.

Mr. Tuttle was born at Shorter, Ala., and joined the C. of Ga. on July 1, 1908, as clerk in the freight agent's office at Montgomery, Ala. He later served as soliciting agent, freight service agent, commercial agent, division freight agent, and assistant freight traffic manager.

**William J. Donsbach**, division freight agent of the LEHIGH VALLEY at Newark, has been appointed assistant general freight agent at Philadelphia, succeeding **Colin C. Brown**, who has retired after 33 years of service with this road. **John J. Kiernan**, district freight agent at New York, succeeds Mr. Donsbach and is succeeded by **Charles D. Rockhill**.

**Edward T. Butler, Jr.**, western industrial commissioner of the ERIE at Cleveland, has been appointed eastern industrial commissioner at New York, succeeding the late **H. J. Hart**.

**F. Thomas Parker**, agent of the TORONTO, HAMILTON & BUFFALO at Brantford, Ont., has been appointed district freight agent at Chicago.

**Edward N. Brown** has been appointed foreign freight agent for the SOUTHERN PACIFIC at CHICAGO, succeeding **J. C. Klein**, retired.

## PURCHASES & STORES

**R. E. Taylor** has been appointed general storekeeper of the CHICAGO, INDIANAPOLIS & LOUISVILLE at Lafayette, Ind. Mr. Taylor entered the service of the Monon in 1917 in the signal department, and subsequently served in clerical positions in the mechanical, transportation and stores departments. He was appointed storekeeper at Indianapolis in 1942, and went to Lafayette as special representative to the purchasing and tax agent in February 1951. It was from this position that he received his recent promotion.

**H. C. Crowder**, division storekeeper of the Idaho division of the NORTH-

ERN PACIFIC at Parkwater, Wash., has been appointed district storekeeper at Brainerd, Minn., succeeding **J. S. Sewall**, retired. **L. D. Scribner** succeeds Mr. Crowder at Parkwater.

## ENGINEERING AND SIGNALING

As announced in *Railway Age* January 21, **M. R. Beamer** has been appointed superintendent of communications of the TEXAS & PACIFIC at Dallas, Tex., succeeding **W. A. Roberts**, retired. Mr. Beamer was employed by the Southwestern Bell Telephone Com-



M. R. Beamer

pany from 1936 to 1944, and was with the Western Electric Company's radio division until 1945, when he joined the T.&P. as communications engineer.

Mr. Roberts joined the railroad as a lineman in 1914. After serving in various capacities, he became superintendent of telegraph in 1941, and held this position until his retirement.

**J. E. Tiedt**, engineer of water service and work equipment for the CHICAGO, ROCK ISLAND & PACIFIC, has been appointed engineer of tests, with headquarters as before at Chicago.

**P. J. Calza**, master carpenter for the CHICAGO, ROCK ISLAND & PACIFIC at Liberal, Kan., has been appointed engineer of water service at Chicago.

## MECHANICAL

**J. J. Miller**, mechanical and electrical superintendent of the NIAGARA, ST. CATHARINES & TORONTO (CANADIAN NATIONAL) at St. Catharines, Ont., has been appointed electrical superintendent, St. Clair Tunnel, at Port Huron, Mich., succeeding **H. W. Wreford**, resigned.

**L. H. Bexon** has been appointed director of training in the mechanical department of the CANADIAN NATIONAL. Formerly supervisor of apprentice training, Mr. Bexon's duties have been extended to include supervision over

all training and educational programs in the mechanical department, including diesel training.

**Frank Fahland** has been appointed general mechanical engineer of the UNION PACIFIC at Omaha, in place of **Max C. Haber**, who will assume Mr. Fahland's duties as research and standards engineer, also at Omaha.

After graduating from the University of Minnesota college of engineering, Mr. Fahland served as a draftsman for the Northern Pacific in 1923. He joined the U.P. in 1936 as assistant engineer of design and material.

Mr. Haber was graduated from the University of Nebraska, with a degree in mechanical engineering. He joined the U.P. in 1922 as a tracer, and has served as draftsman, engineer of road tests and mechanical engineer.

## SPECIAL

**I. Shuman** has been retained by the PENNSYLVANIA as consultant for its publications, at Philadelphia. Mr. Shuman was executive editor of the New Yorker and of Holiday and executive vice-president of Esquire and Coronet prior to 1944, when he went into business for himself as magazine editorial consultant for various publishers, including Marshall Field.

## OBITUARY

**Charles Barham**, retired vice-president — traffic of the NASHVILLE, CHATTANOOGA & ST. LOUIS, died on January 14 in Sarasota, Fla. Mr. Barham began his railroad career in 1887 as a stenographer for the Richmond & Danville (now the Southern), and was soliciting agent and foreign freight agent for the Southern before joining the N.C. & St. L. in 1898 as chief clerk to traffic manager. He later served successively as assistant general freight agent and general freight agent, and in 1928 was elected vice-president and general manager. He became vice-president—traffic in 1939, and remained in that capacity until his retirement in 1946. He was on leave of absence from the railroad from 1922 to 1928, when he served as chairman of the executive committee of the Southern Freight Association.

**John Richard Hayes**, 60, division passenger agent of the BALTIMORE & OHIO at Baltimore, died on February 13 after an extended illness.

**Theo B. Durfee**, whose death on January 14 was reported by *Railway Age* February 4, had served as comptroller for the TOLEDO, PEORIA & WESTERN since 1947. He started with the T.P.&W. in 1904 as clerk, and held various clerical positions in the accounting department until 1928, when he was promoted to general accountant. It was from this position that he was appointed comptroller.



## Current Publications

### PERIODICAL ARTICLE

*The Desire to Be Somewhere Else*, by David P. Morgan. *Trains*, February 1952, pp. 14-17. Kalmbach Publishing Company, 1027 N. 7th st., Milwaukee 3, Wis. Single copies 35 cents.

Mr. Morgan thinks that if the railroads exploit the American urge to travel and "be somewhere else," many of them can cure their passenger problems. He cites as an example the "California Zephyrs." These trains began operation over a comparatively unknown route and on a timetable 10 hours slower than the competition, but by molding a passenger service around the passenger, and employing every tool available to exploit the natural advantages and offset the obvious disadvantages of their Chicago-San Francisco route, the three roads involved—the Chicago, Burlington & Quincy, the Denver & Rio Grande Western and the Western Pacific—have made them "pay off."

### PAMPHLETS

*Bulletin No. 84, Railway & Locomotive Historical Society*. 77 pages, illustrations. *Railway & Locomotive Historical Society, Baker Library, Harvard Business School, Boston, Mass.* \$1 to members; \$2 to non-members.

This bulletin contains articles on the Bellingham Bay & British Columbia logging railroad, the Ithaca-Auburn Short Line, the Scranton, Dunmore & Moosic Lake railroad and the Northern Cross railroad. In addition, there is an article on locomotives of the Buffalo, Rochester & Pittsburgh (Baltimore & Ohio) and one on the early railroad days on the old Nashville & Chattanooga, based on papers presented at meetings of the "Old Guard"—a club formed in May 1907 by a group of Nashville, Chattanooga & St. Louis employees whose service records on that road extended back to pre-Civil War days.

*Aerial Surveys and Maps from Photographs*. 17 pages, illustrations, maps. *Abrams Aerial Survey Corporation*, 606 E. Shiawassee st., Lansing 1, Mich. Free.

The purpose of this booklet is to present a brief non-technical explanation of aerial photogrammetry. The photogrammetric process is diagrammed, and succeeding pages illustrate planes and cameras used in aerial photography and instruments used in laboratory processing. The various maps and photographs that are available from aerial surveys are illustrated and explained.

*Handbook on Sanitation of Dining Cars in Operation*, prepared by the Public Health Service, Federal Security Agency. 14 pages, illustrations. *Government Printing Office, Washington 25, D. C.* 20 cents.

*Handbook on Sanitation of Railroad Passenger Car Construction*, prepared by the Public Health Service, Federal Security Agency. 15 pages, illustrations. *Government Printing Office, Washington 25, D. C.* 15 cents.

These handbooks contain principles and procedures of sanitation intended to safe-

guard health of passengers and railroad employees. They are the third and fourth of a series of pamphlets dealing with various interstate carrier sanitation requirements of the Interstate Quarantine Regulations. The two preceding booklets dealt with vessels in operation and railroad servicing areas. (See *Railway Age*, August 6, 1951, page 107, for this latter pamphlet.)

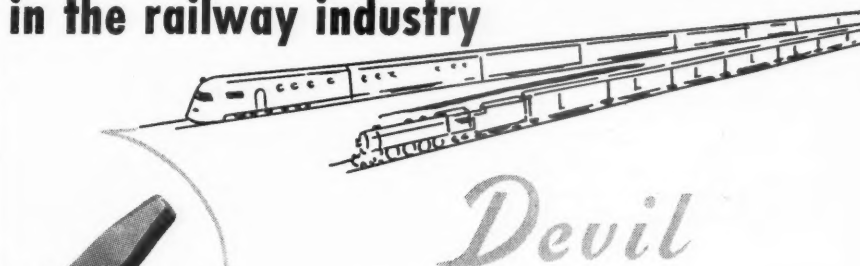
The handbook on dining cars covers maintenance of every part of the car, such as floors, walls, ceilings, doors and windows, lighting and ventilation. It dwells on provision of adequate facilities for the personal cleanliness of employees and for

cleansing of equipment and utensils; and it also covers refrigeration, waste disposal, ratproofing, and other important items.

The construction booklet deals with the planning and building of new railroad cars. A foreword explains that the philosophy behind its publication is based on the premise that "It is more practical to 'build in' facilities which will permit the practice of sound sanitation principles than it is to make costly changes later."

Both booklets were produced in cooperation with the Joint Committee on Railway Sanitation of the Association of American Dining Car Officers.

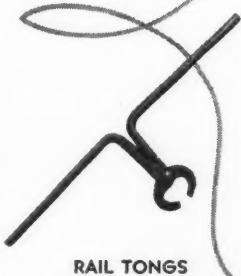
## Two Old Names in the railway industry



DEVIL  
RAIL FLATTER



SLUG DEVIL  
DOUBLE FACE  
BLACKSMITH SLEDGE



RAIL TONGS



DOUBLE END  
TRACK WRENCH

DEVIL alloy steel tools, introduced by Warren Tool Corporation in 1922, are the result of continuously striving for improvement in forged steel hand tools.

DEVIL tools are special electric furnace alloy steel, forged and heat treated to meet the standards of the American Railway Engineering Association.

Warren Tool pioneered the use of alloy steels in forged hand tools . . . they're still the leaders. Ask for DEVIL tools when you want the best.

## WARREN-TEED

WARREN-TEED railway maintenance tools are well known by railroad men who have found through the years that "Warren-Teed" stands for high quality.

They are made of special open hearth carbon steel. They are forged and heat treated to A.R.E.A. specifications. Faces and bits on all striking and cutting tools are highly polished.

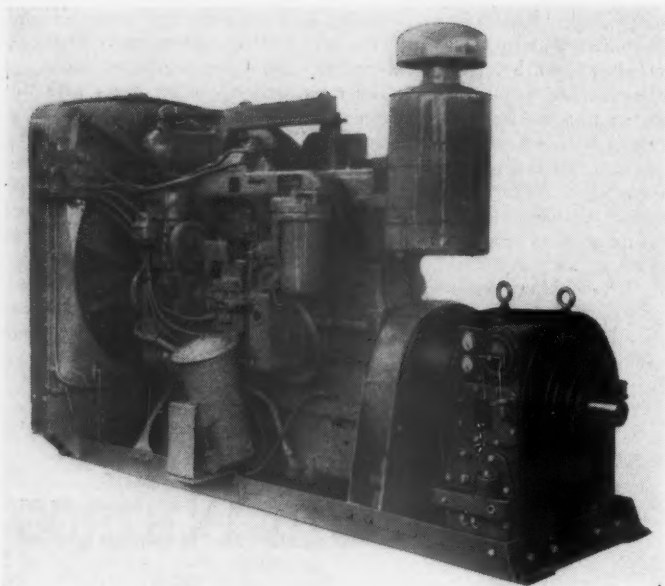
Warren Tool Corporation is maintaining its policy of constantly raising the quality of forged hand tools. Look to the leader when specifying railway track tools.

### WARREN TOOL CORPORATION

Manufacturers of Warren-Teed and Devil Railway Tools

General Offices . . . Warren, Ohio

Export Division . . . 30 Church St., New York 7, N. Y.



### Single Stage Torque Converter

The addition of the model 17-K single-stage, three element type unit to the standard line of torque converters has been announced by the Torcon Corporation, Ashtabula, Ohio. Combining a hydraulic torque converter and hydraulic coupling in a single unit, it provides automatic transmission for service equipment, locomotives, rail cars, and materials handling de-

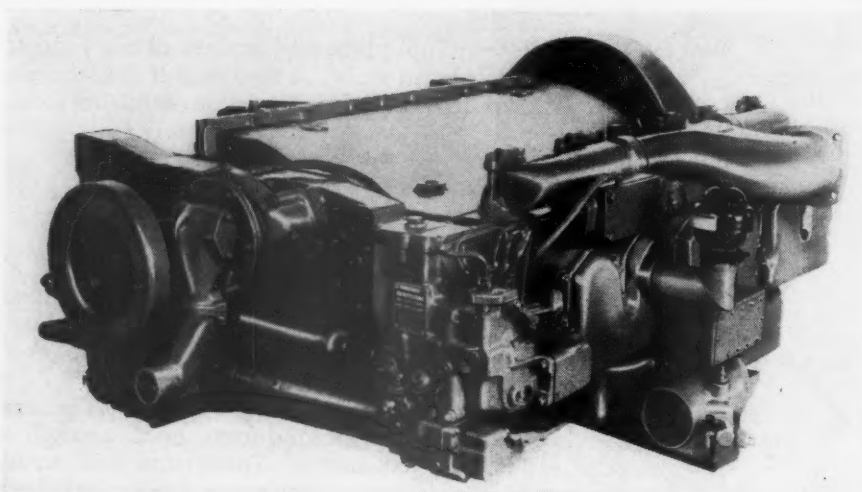
vices such as lift trucks, and front end loaders. This model can be used with gasoline diesel engines rated up to 300 hp. It is roller-bearing equipped.

This converter has a variable torque ratio up to 3:1. At zero output speed, the torque multiplication is highest and this gradually decreases with increasing output speed until a point is reached where the output and input torque are equal.

Major elements of the unit consist of the converter pump, converter tur-

bine and reaction member. Piston-ring oil seals, which contain the oil in the working elements, permit passage of a small amount of oil to provide continuous bearing lubrication.

Its chain-driven circulating pump is mounted on a base plate for ease of inspection. The converter uses standard S.A.E. No. 10 motor oil and incorporates built-in oil filter, temperature and pressure gages. It can be modified to meet the specific requirements of individual applications.



### Lightweight Horizontal Diesel

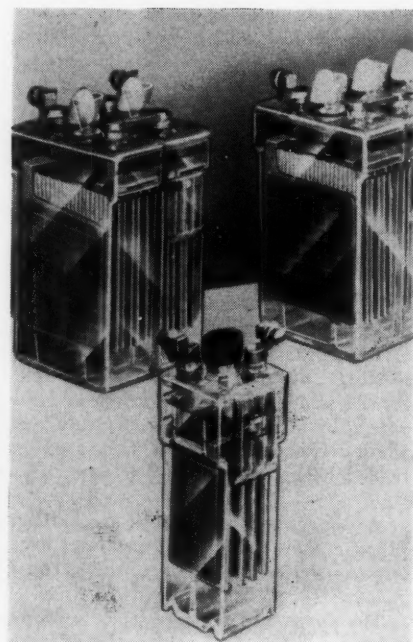
The Cummins Engine Company, Columbus, Ind., announces the availability of the new horizontal 200 hp. model NHHB-600 diesel engine. This latest addition to a line of 84 models of lightweight units has been designed for rail car applications and for city and inter-city busses.

It is a 6-cylinder full diesel, which produces 200 hp. at 2,100 r.p.m. and

has a compression ratio of 15.5:1. Displacement is 743 cu. in. with a bore and stroke of 5-1/8 in. by 6 in. Its weight is 2,285 lb.

Dimensions of the engine are: length 63-15/16 in., width 55-1/4 in., and height 22-3/4 in. This size makes it adaptable for underfloor installations. The diesel fuel recommended for use in this unit is lower priced than the fuel burned in most other types of diesel coaches.

## New and Improved Products Of the Manufacturers



New plastic containers for storage cells are transparent and less fragile than glass.

### Plastic-Cased Batteries

A new line of plastic batteries for use in the railway signaling and communications field has been announced by Gould-National Batteries, Inc., Trenton 7, N. J. These batteries are available over a wide capacity range—from 10 a.h. to 100 a.h. (at the 8-hr. rate of discharge). The polystyrene containers are smaller in overall dimensions, do not react with the electrolyte, are transparent (giving a visible indication of electrolyte level), and have better shock resistance than glass containers.